

BANKING AND CURRENCY

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LONDON : W. B. CLIVE

University Tutorial Press Ltd.

HIGH ST., NEW OXFORD ST., W.C.

1922

PREFACE.

THE practice of using money as a medium of exchange is one of those things so familiar that the underlying principles are rarely considered, and more rarely understood. Yet the subject of Banking and Currency is of so great importance that it has now obtained recognition as worthy of a place in University Courses.

The University of London, for instance, prescribes Banking and Currency as part of the Intermediate Examination in the Faculties of Economics and of Commerce. The Syllabus for these Examinations, drawn up as it has been by experts, is the frame-work for the present book. This, though intended primarily as a handbook for candidates, will also serve, one hopes, as an introduction to the subject for all interested in our currency system and in its changes consequent upon the Great War.

The Author's best thanks are due to Mr. Albert Dunn, B.Com., for reading the proofs and making a number of useful suggestions.

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BANKING AND CURRENCY.

CHAPTER I.

MONEY AND ITS FUNCTIONS.

“For what is worth in anything
But so much money as 'twill bring?”

—Butler's *Hudibras*.

Without clear ideas upon the nature of Money the student of Economics is hampered at every stage. For the motives of men come within his scope only to the extent that they are *measurable in Money*. The chemist has his delicate balance; the physicist has his finely graduated ruler; the economist must perforce be content with a less accurate measure.¹ A piece of standard money is a comparatively rough measure. Yet by its means economic science makes progress; the motives prompting the actions of men are measurable by a money price. It is a measure and, used with care and intelligence, gives tolerably reliable

¹ Every science has some instrument of precision, which may be taken as the material type of that science, which it has advanced by enabling observers to express their results as measured quantities. In astronomy we have the divided circle; in chemistry, the balance; in heat, the thermometer; while the whole system of civilised life may be fitly symbolised by a foot-rule, a set of weights, and a clock.” (Clerk Maxwell.)

results. The business man, too, who is the economist in practice, feels more confidence in his calculations when he understands something of monetary problems. Most of the perplexities that troubled trade after the war were connected with money. The measure to which business men had grown accustomed, in which they reckoned values, had been^o tampered with; and trade suffered.

The economic importance of Money to a community is far greater than suggests itself at the outset. It is said, and of course with justice, that the increase in the material well-being of men is owing to Division of Labour.

Economic
Importance
of Money.

We might with equal justice ascribe that increase to the greater extent in which men exchange with one another. Division of Labour is possible only when men have learnt to exchange; it is, say the economists, limited by the extent of the market. South-east Lancashire is enabled to concentrate mainly upon the production of cottons for the nations of the world, the whole district becomes a wonderfully efficient machine for the one purpose. It can do this because trade carries off the products in every direction, to Egypt and India, to China and tropical Africa, to the islands of the Pacific and to the Balkan States—all agreeing in their welcome of cheap cottons if in nothing else. And this exchange that we call trade can develop beyond its crude and unimportant beginnings only by the agency of Money. Barter, the direct exchange of commodity for commodity, or service for service—"Do this for me, and I will do that for you"—is practicable in some slight degree; it persists even in highly civilised communities. And when, as happened in many regions during the Great War, the money system breaks down, men again have recourse to barter. In our own days of rationing through war conditions, the baker's wife had

many a bargain with the butcher; and loaves made of good white flour purchased a joint not sanctioned by the Food Controller.

Industrial progress is possible, however, only in so far as a money economy replaces barter.¹ Without Money the difficulty of bringing together people with reciprocal wants would be insuperable; and Exchange, which alone makes Division of Labour possible, could have little scope. Division of Labour, Exchange, and Money, have all developed together; they are all mutually cause and effect. An urgent need for a means of comparing the products of different occupations constituted the imperious demand for Money; the adopting of a system for measuring values—of a device whereby things could be arranged in an order of precedence—enabled Exchange and with it Division of Labour to be extended. Exchange is, we are to note, logically a part of Production; since the process of Production is not complete until the commodity is in the hands of its consumer. And it is Money that enables the innumerable Exchanges incident to our complex society to be performed easily and speedily, that helps Production in fact. Money plays, therefore, a part the importance of which it would not be easy to exaggerate in the economic life of peoples.

The elaborate experiment conducted in Russia showed

¹ This does not, we should note at the outset, imply that metallic money must of necessity intervene in every exchange, or even be in existence. If a man who served the community could get a credit for his service, in a banker's books for example, there need be no money. The benefactor of the community could obtain for this credit those services, embodied or not in commodities, he himself wanted—to the extent of his benefaction. All we should need would be a recognised unit of value, a Money of Account.

how vain is the attempt of a modern community to dispense with an efficient medium of exchange. It is not often that experiments in economics are possible. Here was one conducted by men keenly desirous of its success; and the impossibility for even Soviet Russia to live without money is the more striking. The Mercantilists perhaps exaggerated the importance of money to a community; though we should note in passing that all the arguments of the economists have not convinced civilised governments of the absurdity of seeking after money, of storing up gold. We in these days are, on the other hand, probably apt to underrate the importance of money: we need such a sharp lesson as that afforded by the War of 1914-1918 to make us realise how much dislocation, how much keen suffering indeed, is brought about by tampering with the currency system. So long as currencies were based on gold, and therefore kept in a stable relation to one another, exchanges among men were easily and smoothly effected. The ordinary man had no need to trouble about the currency. The gold standard was for a while relinquished; and currency questions became no longer matters of interest for the mere theorist. They became matters of urgent practical importance, they affected men's means of making a living.

Consider the economics of the matter for a while. We no longer satisfy our wants directly: those recurring wants of food, those constant wants of clothing and shelter are satisfied as a result of buying and selling—indirectly that is. A man may be fed in the factory, clothed in the field; he “makes his living”—to use the curious phrase—by selling his services. We sell in order to buy. We obtain money for our services; we spend that money in procuring the necessities sustaining life and the comforts making

life pleasant. We live by exchanging. In modern times we are all specialists; we are all occupied at one tiny operation of the great production machine. Money permits our specialised effort to be turned into generalised enjoyment; we may say that each one of us is a factor in specialised production, and that the money we get entitles us to generalised consumption. We direct our efforts in one direction; by means of money our desires are satisfied in many directions.

Money is a "bearer of options": it enables us to exercise power over the diverse products of men of all nations. We co-operate with hundreds and thousands of other workers, in widely separated parts of the world perhaps, and maybe belonging to times long past. With their aid we produce the food men eat or the clothes they wear or the houses they inhabit or the luxuries in which they delight. What an enormous number of workers have united their efforts so that this fountain pen with which I write may be at my disposal. Unconscious of the co-operation most of them were; ignorant of the ultimate outcome of their work they must necessarily have been. Doubtless, too, it is but the tiniest part of the payment to the ship-builder or the railroad-maker, who enabled the materials of the pen to be assembled, that I provide in the price I pay. The fact remains that this small instrument is the resultant of a vast multitude of efforts; and that the price paid is distributed in ever smaller and smaller portions among the great army of co-operators. One current has brought me the pen from its "raw materials" through a number of strange transformations; a counter-current takes from me the remuneration of the successive producers who have made those materials more fitted for my purpose. Money enables the co-operation to take place; for it enables exchanges to be made readily and easily.

It permits of the rewarding of the co-operators in proportion to the service they have performed for society. The intervention of money may possibly have drawbacks: money may, for instance, obscure the truth that we obtain such things as we want by ourselves producing the things other people want: that we produce in order to enjoy; and that, in the long run and on the whole, the more we produce the more we are enabled to enjoy. Such a drawback to Money is, however, negligible when compared with its manifold and great advantages.

A negative illustration of the importance of a sound system of Money was afforded by the breakdown of the currency system of Central Europe as a result of war conditions. The shattering of the economic life of Austria and Russia, the death not of thousands but of millions through famine and disease, the disorder among the bewildered peoples that had become accustomed to rely upon settled and ordered trade, may all be ascribed in large measure to the destruction of the recognised medium of exchange. As the paper currency, issued more and more lavishly by the belligerent governments, became more and more depreciated, it ceased to be a valid claim upon the goods produced. The peoples were reduced to the rude and wasteful method of barter; and the existence of crowded industrial populations, dependent upon a ready outlet for their products, became hopeless. The disastrous famine that during the winter of 1921 swept over Russia and over much of Austria can be attributed very largely to the breakdown of the currency system. One of our representatives at the 1920 Finance Conference at Brussels, Mr. Bell of Lloyds Bank, gives us an account of the dislocation caused in trade and industry:—

The
Breakdown
of a Money
System.

"In Austria, when the great armies came home from the war and there was nothing to do—industry was shattered—the State was confronted with millions of men who were perforce idle and without any means of livelihood. What did they do? Among other things, where there was one railway porter they put six or eight, and those men had to be paid the rate of wages of the day; there was no money to pay them, and so the printing press was brought in and turned round so many hours day and night until bits of paper were produced to pay the men who were doing nothing on the railway, but had to be kept. Very shortly these pieces of paper became more or less valueless, and these men said:—'We cannot buy tea, bacon, bread, and sugar, we cannot pay our rent, we cannot feed our children, we cannot clothe our wives and ourselves with these particular numbers of pieces of paper, we must strike for double that number of pieces of paper.' Very well. Then the printing press went on again and double the number of pieces of paper were produced—not things, symbols, which did not mean things.

I had in my bank the other day one of the very latest of those who have got away from Russia. He said: 'Before I left I paid £36, pre-war price, for a glass of milk; I gave £400, pre-war price, for a loaf of white bread; my living expenses were £8,000 per month, or £96,000 per year, pre-war price, in paper to enable me to live; and the Russian Government, seeing that it was objectionable to have every pocket in a man's suit bulging with paper enough to pay for a loaf of bread or a cab drive, or any of the small necessities of life, are printing now pieces of paper, bank notes, of 25,000 and 50,000 denomination of roubles to save carrying more notes.'

We had evidence, I am very sorry to say, not only of great disorganisation but of something worse, dishonesty.

I am not an apologist for any Old Regime on principle, but it is the case that the New Regime of Europe is not as honest as the Old Regime. The Americans brought from America hundreds of thousands of pounds' worth of tinned goods, milk and other things, to Austria. They were put in trains at the ports to be taken to Vienna, where the Austrian children were dying. Those trains were held up at every junction until a bribe was paid to the station-master, in order to let the trains go through. You could not buy fresh milk in Austria, and American milk had to be brought over; but across the frontier, thirty miles away, farmers were feeding their pigs on fresh milk.

We had to say something about this. It was not said openly, it was said largely in conversation. To those nations we said: 'Now look here, you have had old quarrels, old grudges, you will not part, one with his pigs which are wanted there, and the other with his milk which is wanted there; you perforce require other nations to bring thousands of miles these commodities which you require; they are not going to do it, you will have to get busy and exchange your commodities and resolve all these ancient grudges.' The answer was: 'Well, we might exchange certain commodities for others, but we are not, in this country, going to sell our milk for a number of notes which are worth nothing to us and with which we can buy nothing when we have them.' And so the exchanges were all demobilised."

It would appear that, once the Government of a State enters upon a policy of tampering with the currency, the evil can hardly be stayed. During 1921 in Russia efforts had been made to make the value of the rouble stable. But the fatal facility of paper money was too strong a temptation to withstand. At the beginning of 1922 inflation and the resulting depreciation set in with increased

violence. Up to May the rouble was actually losing half its value in a month. If, therefore, a trader wished to keep his capital intact he had to make at least a hundred per cent. profit a month. The inevitable result was that no one sought to save. Hoarding was absurd; for no sane man would retain his money longer than the time it took to buy something with it. As illustrations of the amazing rapidity in the fall of purchasing power we have such facts as this: on April 15th a box of matches in Moscow cost ten thousand roubles; it cost sixteen thousand on April 18th. Could any sober mercantile calculations be made when a rise of sixty per cent. in three days was possible?

Macaulay, in his own vivid manner, gives another such instance. Speaking of the disorders that obliged William the Third's government to improve the coinage he says:—"It was absolutely necessary to apply a remedy to an internal evil which had by slow degrees grown to a fearful magnitude. The silver coin, which was then the standard coin of the realm, was in a state at which the boldest and most enlightened statesman stood aghast.

Till the reign of Charles the Second our coin had been struck by a process as old as the thirteenth century. Edward the First had invited hither skilful artists from Florence, which, in his time, was to London what London, in the time of William the Third, was to Moscow. During many generations, the instruments which were then introduced into our mint continued to be employed with little alteration. The metal was divided with shears, and afterwards shaped and stamped by the hammer. In these operations much was left to the hand and eye of the workmen. It necessarily happened that some pieces contained a little more and some a little less than the just quantity of silver: few pieces were exactly round; and the rims

were not marked. It was therefore in the course of years discovered that to clip the coin was one of the easiest and most profitable kinds of fraud. In the reign of Elizabeth it had been thought necessary to enact that the clippers should be, as the coiner had long been, liable to the penalties of high treason. The practice of paring down money, however, was far too lucrative to be so checked; and, about the time of the Restoration, people began to observe that a large proportion of the crowns, half-crowns, and shillings, which were then passing from hand to hand, had undergone some slight mutilation.

That was a time fruitful of experiments and inventions in all the departments of science. A great improvement in the mode of shaping and striking the coin was suggested. A mill, which to a great extent superseded the human hand, was set up in the Tower of London. This mill was worked by horses, and would doubtless be considered by modern engineers as a rude and feeble machine. The pieces which it produced, however, were among the best in Europe. It was not easy to counterfeit them; and, as their shape was exactly circular, and their edges were inscribed with a legend, clipping was not to be apprehended. The hammered coins and the milled coins were current together. They were received without distinction in public, and consequently in private, payments.

The financiers of that age seem to have expected that the new money, which was excellent, would soon displace the old money, which was much impaired. Yet any man of plain understanding might have known that, when the state treats perfect coin and light coin of equal value, the perfect coin will not drive the light coin out of circulation, but will itself be driven out. A clipped coin on English ground went as far in the payment of a tax or a debt as a milled crown. But the milled crown, as soon as it had

been flung into the crucible or carried across the Channel, became much more valuable than the clipped crown. It might therefore have been predicted, as confidently as anything can be predicted which depends on the human will, that the inferior pieces would remain in the only market in which they could fetch the same price as the superior pieces, and that the superior pieces would take some form or fly to some place in which some advantage could be derived from their superiority.

The politicians of that age, however, generally overlooked these very obvious considerations. They marvelled exceedingly that everybody should be so perverse as to use light money in preference to good money. In other words, they marvelled that nobody chose to pay twelve ounces of silver when ten would serve the turn. The horse in the Tower still paced his rounds. Fresh waggon loads of choice money still went forth from the mill; and still they vanished as fast as they appeared. Great masses were melted down; great masses exported; great masses hoarded; but scarcely one new piece was to be found in the till of a shop, or in the leathern bag which the farmer carried home from the cattle fair. In the receipts and payments of the Exchequer the milled money did not exceed ten shillings in a hundred pounds. Meanwhile the shears of the clip-pers were constantly at work. The coiners, too, multiplied and prospered: for the worse the current money became the more easily it was imitated.

The evil proceeded with constantly accelerating velocity. At length in the autumn of 1685 it could hardly be said that the country possessed, for practical purposes, any measure of the value of commodities. It was a mere chance whether what was called a shilling was really ten-pence, sixpence, or a groat.

The evils produced by this state of the currency were

not such as have generally been thought worthy to occupy a prominent place in history. Yet it may well be doubted whether all the misery which had been inflicted on the English nation in a quarter of a century by bad Kings, bad Ministers, bad Parliaments, and bad Judges, was equal to the misery caused in a single year by bad crowns and bad shillings.

Those events which furnish the best themes for pathetic or indignant eloquence are not always those which most affect the happiness of the great body of the people. The misgovernment of Charles and James, gross as it had been, had not prevented the common business of life from going steadily and prosperously on. While the honour and independence of the State were sold to a foreign power, while chartered rights were invaded, while fundamental laws were violated, hundreds of thousands of quiet, honest, and industrious families laboured and traded, ate their meals, and lay down to rest, in comfort and security. Whether Whigs or Tories, Protestants or Jesuits were uppermost, the grazier drove his beasts to market; the grocer weighed his currants; the draper measured out his broadcloth; the hum of buyers and sellers was as loud as ever in the towns; the harvest home was celebrated as joyously as ever in the hamlets; the cream overflowed the pails in Cheshire; the apple juice foamed in the presses of Herefordshire; the piles of crockery glowed in the furnaces of the Trent; and the barrows of coal rolled fast along the timber railways of the Tyne. But when the great instrument of exchange became thoroughly deranged, all trade, all industry, were smitten as with a palsy.

The evil was felt daily and hourly in almost every place and by almost every class, in the dairy and in the threshing floor, by the anvil and by the loom, on the billows of the ocean and in the depths of the mine. Nothing could be

purchased without a dispute. Over every counter there was wrangling from morning to night. The workman and his employer had a quarrel as regularly as Saturday came round. On a fair day or a market day the clamours, the reproaches, the taunts, the curses, were incessant; and it was well if no booth was overturned and no head broken. No merchant would contract to deliver goods without making some stipulation about the quality of the coin in which he was to be paid. Even men of business were often bewildered by the confusion into which all pecuniary transactions were thrown. The simple and the careless were pillaged without mercy by extortioners whose demands grew even more rapidly than the money shrank. The price of the necessities of life, of shoes, of ale, of oatmeal, rose fast. The labourer found that the bit of metal which, when he received it, was called a shilling would hardly, when he wanted to purchase a pot of beer or a loaf of rye bread, go as far as sixpence. Where artisans of more than usual intelligence were collected together in large numbers, as in the dockyard of Chatham, they were able to make their complaints heard and to obtain redress. But the ignorant and helpless peasant was cruelly ground between one class that would give money only by tale and another which would take it only by weight."

Dispensing with Metallic Money we might conceive a
 scheme of society in which, without needing
 any incentive in the form of money payment,
 each member worked skilfully and vigorously
 at what he could best do, in which the chosen
 occupations were those conducive to the well-being of the
 community, in which—conscious that society is an associa-
 tion of mutual co-operation—each individual subordinated
 his own good to the good of the whole. Sir Thomas More
 in his *Utopia* describes such a society. Our industrial

Could we
 Dispense
 with Money?

system is, however, entirely founded on purchase and sale. Each for the most part, lives not on things in the production of which he himself has helped, but on things obtained by a double exchange. He sells his services (embodied it may be in commodities); he receives a claim upon the stock of things in general. He gives *specialised* services, he receives *general* purchasing power. The amount of purchasing power is testified by the coins or the notes he obtains as the result of his services. Upon each coin or note we may imagine inscribed, "The bearer has rendered this amount of good service to the community; the community is required to render him so much good service in return."

When Robert Owen instituted his National Equitable Labour Exchange he issued notes in exchange for services. These notes, addressed to the Exchange Store-keeper, authorised payment to bearer of exchange stores to the value of "so many hours," not of "so many pounds." The matter is not quite so simple as this, though the conception is sound: our own shares of the National Dividend are allocated, not by means of labour notes, but by means of money. Whether we wish to be or not, therefore, we are all keenly interested in our money system: upon it depends not only smoothness and proportion in Production, but also fairness and right in Distribution.

How shall we analyse the work performed by money?

For only by examining its functions shall
The Work of Money. we be able to obtain a clear idea of Money,
 and to form a satisfactory definition of it.

It is, no doubt, true that even in a complex society like ours commodities are ultimately exchanged for commodities. Money is an intermediary. It cuts the exchange in two. Each sale is the half of an exchange; we do not get money in order to keep it, but in order to spend it for the satis-

faction of our needs. Yet the seeming complication really simplifies matters. Money is the means whereby exchanges are effected; and it does this work because it is a means whereby the comparative values of different commodities may be ascertained. It is the third commodity by comparison with which we may estimate how many yards of calico must be given for a bushel of wheat, how many pounds of potatoes must be given for an ounce of silver. Money is itself exchangeable; it is, in fact, money merely because people are ready to accept it in exchange for goods. Yet it does not do all its work by being exchanged.

In the first place, Money enables us to express the relative values of the things exchanged. It serves as a common measure of values. At a very early stage in the progress of society, the imperative need for a commodity recognised as a means of comparing other commodities must have led to the adoption of many different "moneys." Something generally acceptable, something in constant request, served as the commodity to which others were referred. We can well suppose the owner of a cow willing to exchange for sheep, but dimly conscious that the larger animal was worth more than the smaller. If the cow is valued at so many ounces of silver; if the sheep, too, is measured in the same unit, then comparison is easy, and interminable higgling is avoided. Different lengths are compared by means of a common language called feet and inches; different values are, among us, compared by means of a common language, pounds, shillings, and pence. Money facilitates exchanges much as a system of numbers facilitates calculations, or as a language facilitates thought. Thinking is perhaps possible apart from language; it will certainly be hampered and crippled: exchange is possible without money; it will, however, be a lame and halting method. Even when we

A Measure
of Value.

exchange directly, when we barter a pair of binoculars for a camera, there is a difference from the primitive barter; each party to the exchange more or less consciously measures his article in gold coins, in a money of account. Each uses money though the money is not present.

Tylor's *Anthropology* gives an interesting illustration of the drawbacks resulting from the absence of a unit of value: "The mention of these less precious metals leads us to notice the important part which coin has had in developing civilisation, and this again belongs to the general history of trade or commerce. The modern Englishman, accustomed to shops and counting-houses, hardly realises from what rude beginnings our complex system arose. It is instructive to see trade in its lowest form among such tribes as the Australians. The rough greenstone, valuable for making hatchets, is carried hundreds of miles by natives who receive from other tribes in return the prized products of their districts, such as red ochre to paint their bodies with; they have got even so far as to let peaceful traders pass unharmed through tribes at war, so that trains of youths may be met, each lad with a slab of sandstone on his head to be carried to his distant home and shaped into a seed-crusher. When strangers meet a tribe, they are received at a friendly gathering or corroboree, and presents are given on both sides. No doubt there is a general sense that the gifts are to be fair exchanges, and if either side is not satisfied there will be grumbling and quarrelling. But in this roughest kind of barter we do not find that clear idea of a unit of value which is the great step in trading. This higher stage is found among the Indians of British Columbia, whose strings of haida-shells worn as ornamental borders to their dresses, serve them also as currency to trade with, a string of ordinary quality being reckoned as worth one beaver skin." We need not

suppose any definite selection of a medium of exchange; and, doubtless, in an early community as in one of the latest products of civilisation, more than one commodity at a time may have served. The point is, though, that the third commodity whatever it is—oxen, or slaves, or skins, or women, or measures of meal, etc.—enables things to be compared as exchanged.¹ Barter is the exchange between traders who have no common language, who are ignorant of one another's meaning; money provides the common language.

The unit of value may be anything seen to be desirable and having some uniformity among the specimens. Hunting communities have adopted—tacitly rather than expressly—the skin of a beast; pastoral peoples a head of cattle; agricultural communities a common product of the soil, (a measure of wheat in Attica, a slab of tobacco in Virginia during the seventeenth century). Adornments, pieces of clothing, rifles, hatchets, have all served—and in many parts of the world still serve—as means of comparing the relative values of services and commodities. In one dismal period of the early history of New South Wales, “rum”—

¹ The early aspirations after common and easily recognised weights and measures are exactly analogous to the eagerness of traders for a ready means of comparing the values of commodities. The Great Charter of 1215 would have it that “woollen cloths, wherever they are made, shall be made of the same width, to wit, of two ells within the lists, and of the same goodness in the middle and sides.” If that were made universal there would be less friction in exchanges. So if the “ancient right standard” of the silver penny were maintained the friction due to disputes over values would be obviated. “Thou pale and common drudge 'Tween man and man,” Bassanio contemptuously calls silver; but none that has considered is able to overlook the economic benefit that men have reaped from a sound monetary system.

a general name given to a strong drink of all kinds—became such a measure of value. It could be minutely divided; be easily recognised; and, since nearly everybody wanted it more than anything else, it was readily accepted. Land was paid for in “rum”; labour, food, and clothing were valued at so much of it. Whatever the commodity chosen it becomes a point of reference: just as we compare two fractions like $\frac{4}{7}$ and $\frac{9}{17}$ by establishing a denominator common to the two (making them $\frac{68}{119}$ and $\frac{63}{119}$), so we compare the values of two commodities by considering those values in reference to the value of a third commodity that we call money.

It is not necessary, perhaps it is not usual, for the commodity that constitutes the measure of value to pass when the exchange is made. In a very early contract of buying and selling we may perhaps assume that some measure of the values of the services performed was present though the exchange was direct. Solomon measured in money the value of the cedar trees and fir trees he wanted; Hiram was satisfied that the wheat and oil he obtained reached that value:

“‘I will do all thy desire concerning timber of cedar, and concerning timber of fir. My servants shall bring them down from Lebanon into the sea: and I will convey them by sea in floats unto the place that thou shalt appoint me, and will cause them to be discharged there, and thou shalt receive them: and thou shalt accomplish my desire, in giving food for my household.’

So Hiram gave Solomon cedar trees and fir trees according to all his desire.

And Solomon gave Hiram twenty thousand measures of wheat for food to his household, and twenty measures of pure oil: Thus gave Solomon to Hiram year by year.”

Standard of
Value not
Necessarily
Medium of
Exchange.

Exceptional bargains might thus be effected. What the ordinary business of life needs, however, is liquid purchasing power in the form of money, power that can be made to run in any direction desired. You remember how Moses in *The Vicar of Wakefield* brought back to his father and mother the gross of green spectacles in exchange for the horse, and how disconsolate they were. What they wanted was "general purchasing power"; and Moses had returned with particular articles of problematical purchasing power. In our own case the measure is a carefully determined weight of gold. Sir Robert Peel's famous question, when introducing the Bank Act of 1844, emphasises this: "My first question, therefore, is, What constitutes this Measure of Value? What is the Signification of that word 'a Pound,' with which we are all familiar? What is the engagement to pay a 'Pound'? Unless we are agreed on the answer to these questions it is in vain we attempt to legislate on the subject. If a 'Pound' is a mere visionary abstraction, a something which does not exist either in law or in practice, in that case one class of measures relating to Paper Currency may be adopted; but if the word 'Pound,' the common denomination of value, signifies something more than a mere fiction—if a 'pound' means a quantity of the precious metals of certain weight and certain fineness—if that be the definition of a 'Pound,' in that case another class of measures relating to Paper Currency will be requisite. Now, the whole foundation of the proposal I am about to make rests upon the assumption that according to practice, according to law, according to the ancient monetary policy of this country, that which is implied by the word 'Pound' is a certain definite quantity of gold with a mark upon it to determine its weight and fineness, and that the engage-

Barter is in-applicable to a Complex Community.

ment to pay a 'Pound' means nothing, and *can* mean nothing else, than the promise to pay to the holder, when he demands it, that definite quantity of gold. We want only a certain quantity of paper, not indeed fixed and definite in nominal amount, but just such a quantity and that only, as shall be equivalent in value to the coin it represents." He was not, you note, quite accurate in saying this. "Pound" in its long history has signified many things other than about a quarter of an ounce of gold with a little alloy. What does it signify now?

"The shilling, too, seems originally to have been the denomination of a weight. *When wheat is at twelve shillings the quarter*, says an ancient statute of Henry III., then wastel bread of a farthing shall weigh eleven shillings and four pence" (Adam Smith). Actual payment, however, may be in bronze or silver, or cheque, or book credits. Always with us there is the reference to that weight of gold, though: even in our refinements of currency, in the cheque and the bill, we have somewhere in the background the fixed weight of gold.

During the great stretch of our history before 1816 the unit of value was a pound weight of silver. The actual coins were, however, pennyweights (were $\frac{1}{240}$ of this weight). So, too, in the Homeric poems we have no mention of coined money. But we have mention of a very tangible unit for measuring values, the cow (or ox); and along with it we have mention of the talent (*talenton*, a definite weight) of gold. We read of the relinquishing of "golden arms for brazen, those worth one hundred beeves for those worth nine beeves" (*Χρυσέα Χαλκείων, ἐκίτομβοι ἐννεά βοίων*). It may be presumed, however, that though the measurement of value was expressed in oxen, the actual medium of

The Weight of
Metal is what
Matters.

exchange, for the few exchanges that did take place, was a weight of gold or of silver.¹

In our monetary transactions we nowadays count the pieces of metal instead of weighing them, obviously a much more convenient operation. The coins, we say, pass by tale not by weight. Yet it is the weight that matters, as it was in the early land transaction when "Abraham weighed to Ephron the silver, which he had named in the audience of the sons of Heth, four hundred shekels of silver, current money with the merchant." Currency by weight was first in point of time; and men revert to it whenever the currency becomes debased. We take and give coins by tale because we and others trust to the Government's guarantee of weight. When, however, a banker sends gold abroad he either culls full weight sovereigns or buys bar gold; for in payments abroad his gold passes by weight not by tale. Our sovereign, indeed, used to have a kind of international currency; it was readily accepted upon the Continent and in the East. But that was because the whole world had implicit confidence in its weight and quality; a confidence, it might be well to emphasise, that was thoroughly deserved.

The essential property of money, in other words, is not the serving as a measure of value. That, A Medium of Exchange. indeed, is important; it is, in fact indispensable that a commercial community shall have a gauge for estimating values. How important it is

¹ In an old statute *De Ponderibus* it is declared that 32 grains of wheat taken from the middle of the ear gave the weight of a silver penny. It took four wheat grains to weigh three barley grains; so that we still have "24 (barley) grains make 1 pennyweight." Weight of metal was the matter of importance. The coin was a Government-guaranteed weight; though in process of time the guarantee, in respect of weight, could not be relied on. A silver penny weighed very much less than 24 grains of barley.

we realise very effectively when the measure becomes uncertain and fluctuating. The essential property of money, however, is its power to serve as a pledge whereby he that parts with a commodity or renders a service is assured of a commodity or service—regarded by him as of equal value—in return. It is an intermediary, a medium of exchange. The ultimate exchange is, no doubt, commodity for commodity (service for service); or, applying the statement to the facts of international trade, exports for imports. The intervention of money enables this exchange to be performed in two operations; and, most likely, the second operation between two different bargainers. Money intervenes for a larger or shorter while between the two parts of the transaction. Obviously, though, the more people are able to trust one another the less needful is money as a medium of exchange. In our modern business world, where exists an amazing trust among men, it is hardly needed at all. Its service as a measure of values is alone required.

Money is a visible, tangible assurance that a claim upon the community—a claim based upon services rendered—will be honoured. We take money for our services, because we are convinced that others will take it from us in return for services. And anything in regard to which we have this conviction is money. It may be a piece of metal, the weight and quality of which are guaranteed by the public authority and attested by the public stamp. Such are our gold coins. It may be a written promise to pay gold, given by one enjoying public confidence. Such are the notes of bankers. It may be a piece of paper purporting to be the equivalent of a weight of metal. Such were the Treasury Notes issued during the War period. People do not question whether it really is equivalent: so long as they do not doubt about its ready acceptance by others it

is money. If people did begin to question whether there really was gold behind a note, the note would so far lose its character as money. Money is not "good" if there is any hesitation in its being accepted.

The one property that suffices to make anything whatever into money is the property of being acceptable throughout a community. The community may be a small one, like the inhabitants of one of those towns in which during the European War siege money was issued for 50 centimes and 1 franc, or like the restricted circle among which a cheque signed by a person known and trusted circulates. Dunkirk "Chamber of Commerce Notes" were not current in the Calais area; and a cheque drawn by William Fraser of Liverpool might not be acceptable to a hotel proprietor in Brighton. A party sitting down to a game of poker make, by express agreement, coloured pieces of bone into money; at the particular time and in the particular place—for the purposes of the game, *that is—the counters circulate as money among the players.* And the tiny community may place any value upon them at its will and pleasure. They say "it shall be so" much as a government issues its fiat, its decree, and the money becomes so. They are claims; the claims are satisfied at the end of the game by the player acting as banker. But the coins or notes he exchanges for the counters are, in their turn, merely claims upon a wider community. The agreement to satisfy these claims may be a tacit one. None the less, so long as society holds together, the claims are honoured.

The community ready without question to accept this "money" may be a large one, may in fact include the whole commercial world. So it is with gold, the recognised instrument for the transfer of wealth among nations. Even a Bank of

A Wide Area
of Currency.

England note has a narrower range than coined or uncoined gold. We may not fear in the slightest that the value of the note will be suddenly destroyed through the insolvency of the issuer. Nor, relying upon our Bank Act, need we fear that the value of the note will be suddenly diminished as a result of excessive issues. Yet, because coin can be used as a medium of exchange over a wider area, not because it is made of a more expensive material, the gold is a better money than notes. It is current (runs about on its business of moving property from one owner to another) among many more people. It is more generally acceptable.

The Precious Metals.

Apparently irresistible causes have made gold, and, to a less extent, silver the typical means of exchange; and in a developed society like ours other means of exchange invariably have reference to gold. Cattle may have served as a rough measure of value, though the primitive mind itself must have been conscious of a difference between the fat and the lean kine; as the Laplander must discriminate between the decrepit reindeer unable to run a mile and the stout animal capable of strenuous work throughout the day. We can hardly suppose, though, that cattle actually passed as the intermediary in an exchange. At a very early period jewels were prized and sought after. Here, again the lack of anything like uniformity, the impossibility for anyone except an expert to arrange them in order of precedence, made jewels most unsuitable as a measure of value and therefore as a means of exchange. There could, moreover, be no possibility of regulating purchasing power. The jewel must pass for a single transaction; for its value would be largely destroyed by division. Doubtless being easily carried and concealed, so that a man might have his whole fortune in a small compass, jewels were excellent as

a store of value—as a means of concentrating savings. We are indeed told that in our own highly developed financial system some financiers seek assurance against the changes and chances* of a life of risks by forming such a reserve. When all else fails, the diamonds and pearls possessed by their ladies supply a basis for new schemes. More is needed for a good money material, however, than the capacity to serve as a means of saving as a store of value. To be accepted without question—the essential property of money—money must present itself in easily recognisable form. It must be recognisable without difficulty; it must be accepted at a certain and widely known valuation; and there must be no doubt about quality and quantity. The metals are uniform enough; it needs little skill to recognise them; and, by the process of coining, weight and quality may be guaranteed by the public authority.

Gold and silver, the metals to which the term “precious” has been rather unfairly applied, possess other properties rendering them the ideal money material. The desire for ornament was probably as strong in the first finders of these glittering metals as it is among their latest descendants; and gold and silver satisfy the desire for ornament. Distinction from rarity and costliness of adornment has always been a strong motive among men and women; and the precious metals were never obtained without much toil and trouble. That gold and silver were selected spontaneously by mankind as the money materials makes them more, not less, suitable for this purpose. In like manner bills on London—“sterling bills,” payable at some London bank—have become an international currency for transacting foreign trade. And the financial position of London is the stronger because it is the convenience of merchants throughout the world that has made it the settling place of

international obligations. Neither the choosing of gold as the money material, nor the choosing of a London bill as the means of settling international obligations, results from a definite arrangement among men. Consideration of this suggests how difficult it would be to supersede either.

The most satisfactory definition of lawful money as *that which passes freely from owner to owner throughout the community, in final discharge of debts and full payment for commodities* lays stress upon this primary function of being a readily acceptable pledge. The other functions are in truth derivative from that function. One reason why the "money," whatever it is, passes freely is that people are confident that, though they wait a while, their claims upon the community—claims roused for in the money—will be honoured. In other words, people are confident that what they call a pound will next week, and next year, buy about as much of the necessities and comforts of existence as it does this week. Money is a measure and a pledge for future payments: *it is a standard for deferred payments.*

Now, gold is not absolutely stable in value: an ounce of gold has not, throughout the ages, been Gold Relatively valued at an unvarying amount of wheat or Stable in oil or wine (see Chap. VIII.). Changes great Value. enough to be called revolutions have taken place in the value of gold relative to the value of the other commodities. The changes have usually, however, been so gradual, so slight, that they have been perceptible only by means of careful observation and calculation. Yet gold is less liable to fluctuations in value than the vast majority of the things with which it is compared (*i.e.* which it purchases). *Supply* cannot change rapidly. For, even with modern methods of winning the metal from the intractable substances with which it is bound, the getting of gold is a laborious and tedious process. It is, indeed, quite possible

that on the whole more gold is put into the mines than is taken out of them: the gold-miner—the shareholder in the gold-mine, certainly—gets less than the ordinary rate of profit, the balance being made up by the exhilaration of the adventure (either the venture of money or of labour). And we may dismiss those rumours of “synthetic gold” (whereby Germany will pay off her war reparations and upset the world’s money economy) as American lecture sensations or journalistic inventions. Nor, until there is a complete alteration in men’s minds, can demand change rapidly: the hunger for gold is universal, is a part of our history and literature, is as keen among half-savage races as among the highest developments of civilisation. We may, if we like, say that the value of gold is largely dependent on custom, on fashion: it is a convention. But then custom is a factor in value, and the custom of desiring gold is ingrained in men’s minds. From age long experience men know that gold will be readily accepted in exchange; and anything readily accepted in exchange is money.

We are told that the amount of “savings” in a community, as with an individual, depends upon two factors—the power to save (the extent to which production exceeds necessary consumption), and the will to save (the readiness to abstain from the utmost possible consumption). Obviously, a person can only save what he is not obliged to spend; and, obviously too, few are willing to confine themselves to what are the barest necessities of life. Both factors are needed if saving is to continue: we must have a considerable surplus over bare necessities; and we must have some reason for being willing to abstain from consuming that surplus. There is nothing absurd in speaking in this sense of the abstinence of a great capitalist. His will to save is doubtless stimulated by the increased power at his

Money enables
“Savings” to
Accumulate.

disposal in the future; and his personal consumption doubtless extends to far more than "mere" necessities. Yet without the knowledge that he would in future—and ultimately by his last will and testament—be able to dispose of his accumulated claims upon the community, we may assume that his already great expenditure upon unproductive purposes would be immensely greater. He would find some way of employing his "earnings" for his personal gratification; and this way might not conduce to the benefit of the community. Money, so long as it has something of stability in purchasing power, gives him the knowledge that the claims he accumulates will remain at his disposal; and so he continues to accumulate claims—attested by figures in the banker's ledgers.¹

"The greatest part," says Mill, "of the utility of wealth, beyond a very moderate quantity, is not the indulgences it procures, but the reserved power which its possessor holds in his hands of attaining purposes generally; and this power no other kind of wealth confers so immediately or so certainly as money." The capitalist, therefore, stores up value—"saves money." But this phrase no longer means the hoarding of coined treasure. It means that to the banker, the ledger-keeper of the community, has been handed over control of a part of the community's income,

¹ Clearly, saving would be pointless if there was a possibility, much less a probability, that the thousand pounds would speedily buy no more than a thousand pence would have done. The precipitous fall in value of the Austrian crown killed saving in that dismembered country. There, we are told, instances like the following taught men to spend and enjoy rather than to save and wait. Twenty thousand crowns were left equally to two brothers: the one left his share in the bank and it is still ten thousand crowns—with a purchasing power that has dwindled almost to nothing; the other spent his share on costly wines—and the empty bottles now command more than the ten thousand crowns.

services and commodities. This control is again handed by the banker to the broker, or more usually directly to the man who can develop trade and industry by its means. The "money" saved, therefore, supports some kind of productive labour—since only by so doing, only by the constant reproduction with a profit of the goods consumed, could the system continue. Money that is, not only adds to the power to save, since by facilitating exchange it increases the productive capacity of a community; it also provides an incentive to the will to save, since it assures the saver that his abstinence from present consumption will enable him to dispose of claims to consumption in the future. As affording a store of value, therefore, money in its latest development—as a claim upon the banks—performs a very desirable function for a community. The amassing of capital will proceed if there is a reasonable hope that he who saves will in the future be permitted to enjoy.

Thus we have :

— | "Money's a matter of functions four,
 | A medium, a measure, a standard, a store."

But these functions are not equal in importance; and their importance has varied with the development of money among us.

Now that our banking system has so developed that figures in a banker's books are the evidence of a person's claims upon the community, metallic money has ceased to be of importance as a store of value. Hoarding is practised only when a civilisation breaks down, and when it becomes general it ruins the credit structure. There was, even among us, some hoarding at the outbreak of war in the August of 1914; but most of our people were still content to have their wealth attested in the bank ledgers.

And, as we shall see later, it is only in the smallest transactions that metallic money now serves as a medium of exchange. With the increase of long term transactions the function of money as a measure of value (of value here and now, of value at a distance in place or in time) has, however, become of surpassing importance.

CHAPTER II.

VARIOUS FORMS OF MONEY:

METALLIC CURRENCIES AND COINAGE.

We may regard a coin as (1) a definite weight of a definite substance (both the weight and the quality being guaranteed by the public authority), made into a conveniently handled shape and marked with a design enabling people readily to recognise it; or (2) a metal token marked by the public authority and serving as representative of a definite fraction of the standard coin. Our sovereign is an example of (1), our shilling of (2). The guarantee of a person or a corporation, trusted by the people, may be accepted in lieu of the guarantee of the public authority. The bars of silver—*sycee*—current in China bear the seals of banker or of assayer to attest goodness. In most countries, however, the State assumes the monopoly of coinage; the State's guarantee is the one relied upon.

It was a great step in the progress of exchange (and of the civilisation so closely bound up with it) when the precious metals were adopted as the third commodity intervening between things exchanged. A further great step was accomplished when the metals were made into uniform pieces. It obviously adds to the ease and speed with which exchanges can be made when the pieces

pass by tale instead of by weight (by *counting*, a process that even the earliest traders could carry out, rather than by *weighing*, for which the requisite delicate balances could rarely have been available). Very early, therefore, the device of coining must have suggested itself. The precious metal, silver or gold, may have been shaped into approximately uniform rings or bracelets. As such it paid a double debt; it served at once as an ornament—valued the more because of its costliness and rarity, and as the tangible evidence of purchasing power. The “Jewels of gold” referred to in the Old Testament may have been such. Such, certainly, was the “ring-money” we see in old Egyptian sculptures and paintings.

In our own times the transition from coin to ornament (to plate or brooch or chain) and back again (we must wait the buyer when we would sell other commodities, we can have our gold turned into coin at will) is an easy process. “For our martyred Charles I coined my plate,” said the Cavalier; and even during the Great War there were some half-hearted attempts at mobilising the gold in the hands of the warring nations. The qualities, in truth, that have made gold and silver our money material are largely such as are closely connected with ornament. There is the attractive lustre; there is the possibility of manipulating the gold and silver into agreeable shapes (for gold and silver can be readily hammered and drawn into the desired forms); and there is the possibility of imprinting upon them intricate and beautiful designs. Our gold sovereign is a thing of beauty as well as a store of value. The metals are, moreover, comparatively rare; so that possession of them confers a kind of distinction. Widely distributed though gold is, the annual output is less than 400 tons a year, whereas the yearly output of iron is over

Ornament
and Money.

40 million tons. Gold and silver are abundant enough for use as money; a very rare metal, iridium or even platinum, would clearly be unsuitable. Yet gold and silver are not so abundant as to lose value; a small bulk suffices to certify much property. The metals could be divided into portions sufficient to serve as purchasing power for the commodities sought, and the reuniting of portions restored the value of the piece.

Adam Smith, after detailing the various commodities that have served as the common instrument of commerce, concludes: "in all countries, however, men seem at last to have been determined by irresistible reasons to give the preference, for this employment, to metals above every other commodity. Metals can not only be kept with as little loss as any other commodity, scarce anything being less perishable than they are, but they can likewise, without any loss, be divided into any number of parts, as by fusion those parts can easily be reunited again; a quality which no other equally durable commodities possess, and which more than any other quality renders them fit to be the instruments of commerce and circulation.

The man who wanted to buy salt, for example, and had nothing but cattle to give in exchange for it, must have been obliged to buy salt to the value of a whole ox, or a whole sheep at a time. He could seldom buy less than this, because what he was to give for it could seldom be divided without loss; and if he had a mind to buy more, he must, for the same reasons, have been obliged to buy double or triple the quantity, the value, to wit, of two or three oxen, or of two or three sheep. If, on the contrary, instead of sheep or oxen, he had metals to give in exchange for it, he could easily proportion the quantity of the metal to the precise quantity of the commodity which he had

immediate occasion for." We need only look at the various forms of metallic money in some good museum, however, to realise that the device of coinage—enabling the pieces to be taken without hesitation and without question—was the result of a tedious process of evolution.

Money seems to us so obvious a convenience, seems so much a necessary to a society based on exchanges, that we sometimes forget that it is not even now universal: large parts of India and the greater part of Africa have no money.

The invention of coinage is ascribed to the Grecian Gyges ("the golden Gyges") of Lydia at the beginning of the seventh century before Christ. Those who built the pyramids and sculptured the sphinx seem to have had no coined money. The Lydian coins, *staters* (a word implying a definite weight) were of *electron* (a mixture of gold and silver). The colour of the metal, which was found in the country, suggested amber; and the name of amber was applied to it. Following this lead the other Grecian states gradually relinquished the estimating of values in heads of cattle. A silver currency—the stater of Ægina being the standard silver coin—became established. This made trade possible and enabled capital to be accumulated. Possibly it was the priesthood who devised this method of readily reckoning values. For, since men placed their treasures for safe keeping at the shrines of the gods, the priests as custodians would need some speedy method of calculation. The early coins were dedicated to a deity; as indeed our modern coins bear some reference to our religion—our coins bear the image of George, *Dei Gratia*, (by the grace of God) King, Defender of the Faith.

How greatly coining added to the ease with which men were enabled to help one another is admirably explained by Adam Smith himself: "Iron was the common instru-

Coining and
Coins.

ment of commerce among the ancient Spartans ; copper among the ancient Romans ; and gold and silver among all rich and commercial nations.

Those metals seem originally to have been made use of for this purpose in rude bars, without any stamp or coinage. Thus we are told by Pliny that, till the time of Servius Tullius, the Romans had no coined money, but made use of unstamped bars of copper, to purchase whatever they had occasion for. These rude bars performed at this time the function of money.

The use of metals in this rude state was attended with two very considerable inconveniences ; first, with the trouble of weighing ; and, secondly, with that of assaying them. In the precious metals, where a small difference in the quantity makes a great difference in the value, even the business of weighing, with proper exactness, requires at least very accurate weights and scales. The weighing of gold in particular is an operation of some nicety. In the coarser metals, indeed, where a small error would be of little consequence, less accuracy would, no doubt, be necessary. Yet we should find it excessively troublesome, if every time a poor man had occasion either to buy or sell a farthing's worth of goods, he was obliged to weigh the farthing.

The operation of assaying is still more difficult, still more tedious, and, unless a part of the metal is fairly heated in the crucible, with proper dissolvents, any conclusion that can be drawn from it, is extremely uncertain. Before the institution of coined money, however, unless they went through this tedious and difficult operation, people must always have been liable to the grossest frauds and impositions, and instead of a pound weight of pure silver, or pure copper, might receive in exchange for their goods an adulterated composition of the coarsest and cheapest materials, which had, however, in their outward

appearance, been made to resemble those metals. To prevent such abuses, to facilitate exchanges, and thereby to encourage all sorts of industry and commerce, it has been found necessary, in all countries that have made any considerable advances towards improvement, to affix a public stamp upon certain quantities of such particular metals as were in those countries commonly made use of to purchase goods. Hence the origin of coined money, and of those public offices called mints; institutions exactly of the same nature with those of the aulnagers and stamp-masters of woollen and linen cloth. All of them are equally meant to ascertain, by means of a public stamp, the quantity and uniform goodness of those different commodities when brought to market." The hall-marking of gold and silver plate in order to attest the quality of the metal is analogous to the imprint upon the coins. No plate may in our country be exhibited for sale until it has been impressed with the mark of one of the authorised assay offices. The proportionate amount of gold and of silver is placed alongside the mark, the mark of the four assay offices at present open being for London a leopard's head, for Chester a sword erect between three garbs (wheatsheafs), for Birmingham an anchor, for Sheffield a crown for silver, a York rose for gold. The marking is carried out by qualified public officials quite disinterested—as far back as 1423 the King's assayer was spoken of as "a person indifferent betwixt the Master of the Mint and the merchant"—so that we may confidently rely upon the mark as a guarantee. (See Appendix, "Trial of the Pyx".)

Coinage is a public function. Kings and governments are called upon to provide a good measure for value as urgently as they are called upon to provide a good measure for lengths or for weights. Nor should the profit made from coinage be a

**A Government
Monopoly.**

matter greatly considered any more than that a profit should be expected from the administration of justice. The provision of a great public convenience like currency should be regarded as an essential function of government; and any expense it entails is properly borne by the public. Yet princes have at times undertaken the duty of providing currency less from a desire to promote the well-being of their subjects than because they could, by manipulating the coinage, make to themselves an undetected gain.

We have these melancholy conclusions, written in 1776, but abundantly illustrated since, never more forcibly than during recent years: "In every country of the world, I believe, the avarice and injustice of princes and sovereign states, abusing the confidence of their subjects, have by degrees diminished the real quantity of metal, which had been originally contained in their coins. The Roman As, in the latter ages of the Republic, was reduced to the twenty-fourth part of its original value, and, instead of weighing a pound, came to weigh only half an ounce. The English pound and penny contain at present about a third only; the Scots pound and penny about a thirty-sixth; and the French pound and penny about a sixty-sixth part of their original value. By means of those operations the princes and sovereign states which performed them were enabled, in appearance, to pay their debts and to fulfil their engagements with a smaller quantity of silver than would otherwise have been requisite. It was indeed in appearance only; for their creditors were really defrauded of a part of what was due to them. All other debtors in the state were allowed the same privilege, and might pay with the same nominal sum of the new and debased coin whatever they had borrowed in the old. Such operations, therefore, have always proved favourable to the debtor, and ruinous to the creditor, and have sometimes produced

a greater and more universal revolution in the fortunes of private persons, than could have been occasioned by a very great public calamity."

In 1545, for instance, Henry VIII., who had not only spent the hoard gathered by his father but had incurred great debts beyond, at a stroke reduced the number of grains of fine silver in a testoon (or shilling) from ten to four. In order that he might pay only forty per cent. of his debt, he released all other debtors from sixty per cent. of theirs.

Our sovereign is the unit of measurement of value; and its importance far transcends national limits.

A Convenient Currency. The rest of our metallic currency serves for the convenience of the innumerable transactions of daily life, to pay for a bus ride, a cup of coffee, a tie, a visit to a football match. How far is our system adapted for such exchanges? The question is discussed fully in the section relating to Decimal Coinage. Here it may be pointed out merely that a good coinage system is one that enables exchanges to be made readily and smoothly. If we are, in exchange for our goods or services, to accept the coins readily, we must be able easily to recognise them; we must be certain of their weight and quality; we must be confident that others will readily take them from us in return for the services we seek.

The coins should therefore be difficult to counterfeit or to pillage of any of their metal. The various devices of the Mint—the indenting and raising of the edges, the beauty and fulness of the designs—are not solely, or mainly, to produce a handsome coin. They are largely so that successful imitation may be laborious and costly. The sizes, shapes, and weights of the coins, should be convenient for handling and for carrying in the pockets. The crown piece and the double-florin are probably too

large, the threepenny piece too small except, to use the old phrase, "for God and works of charity." The circular disc seems to be the most convenient form: it is certainly better than square pieces or cubes with their sharp corners. Nor need we raise much objection to the weights, though there seems little to be gained from the large bronze pennies and half-pence. The relative values of the coins should, in order that smoothness in exchanges may be obtained, permit of ready division and of the giving of change. It is suggested in Chapter VI. that our present system, combination as it is of the decimal and duodecimal, is in practice thoroughly satisfactory.

It has taken a long time to evolve our present system of currency. The stages in the evolution of currency may roughly be divided into four. (1) There was a currency in which one or more metals passed by weight. (2) Uniform pieces were made, of one or more metals, and these pieces passed by counting, by tale. (3) There was a settlement, a tacit or an explicit agreement, of the relation between one metal and another. It was, for instance, decided that one ounce of gold should be regarded as the equivalent in value to $15\frac{1}{2}$ ounces of silver. There was, that is, a *tarification* of moneys. (4) As men grew more accustomed to trust one another the tangible pledge afforded by the precious metal became unnecessary. Men were content with simple promises to fulfil obligations; and money came to be very largely paper. Yet this latest development itself is linked with the earliest; our paper is a promise to give, or an order to pay, or a certificate entitling one to a definite weight of gold.

CHAPTER III.

ENGLISH MINT REGULATIONS AND COINAGE ACTS: LEGAL TENDER.

MAINTAINING INTERNAL EQUIVALENCE OF LEGAL TENDER MONEYS.

The English system of metallic money is the typical gold monometallic system. Gold alone is legal tender to any amount; gold alone is coined to any extent at the will of the person who owns it, and without any charge; gold is the basis of the currency and the standard of value. The Statute of 1816 (revised and consolidated in 1870 and amended in 1891) decreed that henceforth we should have the single gold standard, that silver should be merely subsidiary. We should note, too, the Act of 1920 whereby the issue of "silver" coins, containing 50 per cent. of nickel was authorised. The Act of 1870, consolidating and amending the Coinage Law, is the one to which we now refer.

The *money of account* is the pound sterling (£) represented by a gold coin called a sovereign. Even when prices are expressed in shillings or pence, the meaning attached to these prices is so many $\frac{1}{20}$ ths or $\frac{1}{240}$ ths of a pound. Not so many silver or bronze coins are to be understood. The guinea, too, though it ceased to be real money in 1816,

still persists as a money of account. It is not, of course, necessary that the money of account should be the standard coin or even that it should be any coin at all. Fees are often enough charged in guineas, yet no guineas are now coined. In France the money of account is the gold franc; but little gold was, even before 1914, in circulation, and no gold francs are coined. In early times a shilling was the money of account for large payments. In the laws of Ine, for instance, we read: "Be sunnan-daeges weorcum: Gif theowmonn wyrchie on sunnan-daeg be his hlafordes haese, sie he frioh, ond se hlaford geselle xxx schillinga to wite." (About Sunday work: If a slave works on the Sunday by the command of his owner, the slave shall be freed, and his owner fined thirty shillings.) But no shilling was coined before 1504. Our gold sovereign can still be our money of account though paper substitutes for it pass from hand to hand: the one thing necessary is that, at the option of the holder of the paper, the gold shall be forthcoming.

The gold coins in common currency before 1914 were the sovereign and half-sovereign. During the war and for a few years following they were replaced by Treasury Notes. With the withdrawal of Treasury Notes there will, in accordance with the recommendations of The Currency and Foreign Exchange Committee (1918) probably be an issue of Bank of England notes of low denominations. It is unlikely that gold will again freely circulate: that forming the basis of our currency, and having exact parity with the notes representing it will be in a reserve in the Bank of England.

Two-pound and five-pound gold pieces were for purposes other than currency also coined. The chief silver coins are the half-crown, florin, shilling, sixpence and threepence. Five and four-shilling pieces are current, though not since 1890 coined

The Standard
of Value.

Our Silver
Coins.

(see p. 53). For the alms-giving ceremony performed for the King on Thursday before Easter (Maundy Thursday), fourpenny (groat), twopenny and penny silver coins are issued. This emission of the smaller coins may remind us of an early attempt to obviate the inconvenience of having coins of one kind only. Down to Edward the Third's reign, silver was the only metal coined, and with a few doubtful exceptions, the silver penny the only coin. For small payments the coin was too valuable; for large payments the weight of silver was a drawback, and the coin was not valuable enough. A curious petition in 1379 begs the king to issue halfpennies and farthings, among the arguments used one being that since beer was selling for three gallons a penny, a pennyworth at a time was excessive, and another that the penny was too valuable "for God and for works of charity," for collections in church and for almsgiving. Token coins were issued to satisfy the demand for small change; and the gold noble—about 10 per cent. heavier than our sovereign and valued at 80 pennies—served in big transactions.

The bronze coins are the penny, halfpenny, and farthing.

Bronze Coins. The subsidiary coins are not related to the sovereign or to one another on any definite scheme, decimal or other. The duodecimal relation (division by twelve) rules rather than the decimal (division by ten). And this system is deeply rooted in the history of our people; so that any change therefore needs serious consideration. Just as in language the best word to use is not necessarily the simplest, but is rather that which serves the most readily to convey thought from mind to mind, so the best money system is that which is best understood by the community it serves. The one idea determining the fixing of the denominations has been the convenience of trade: for practical purposes the coins are well enough,

and that is all we need trouble about. The suggestion for a rigid decimal system is discussed fully in Chapter VII.

Our gold sovereign, the coin upon which our whole currency is based, our standard of value, is a definite weight of pure gold with a little alloy. Our coinage laws (1816, 1870, 1891) decree that 40 pounds troy of standard gold shall be turned into 1869 sovereigns. The proportion of pure gold in standard gold is 22 against 2 of alloy: in other words standard gold is $\frac{11}{12}$ ths pure. Experiments seem to have shown that this proportion gives the coined gold the greatest resistance to abrasion.

The sovereign, too, is our money of account, the unit in which payments are calculated.

It will be seen that one ounce of standard gold is equivalent to $3\frac{1}{16}$ sovereigns. This only is what is meant by the statement that the Mint price of gold is £3 17s. 10½d. an ounce. The Mint price is simply an awkward way of defining the weight of a sovereign: a full sovereign is a little over an ounce troy, or 123·27447 grains. The United States method of fixing the amount of gold appears the more sensible. To fix the weight of a gold dollar there, it is decreed that for every 23·22 grains of gold delivered to the Assay office there shall be delivered one dollar, or one dollar bill.

The coinage of gold is *free*: anyone may have standard gold turned into sovereigns, receiving $3\frac{1}{16}$ ths for every ounce he tenders to the Mint; and receiving for pure (fine) gold $4\frac{1}{4}$ sovereigns for every ounce. The State in its quality of overlord does not take toll (SEIGNIORAGE) of the gold proffered for coinage.

The coinage of gold is also *gratuitous*, no charge is made for turning the bar gold into coins. The weight of

sovereigns returned to the person who takes gold to the Mint is exactly equal to the weight of standard gold taken to the Mint, as if a cotton manufacturer should return the same weight of calico as that of yarn received. The State bears the expenses of coinage (BRASSAGE). This free and gratuitous coinage is, indeed, a striking point about our currency system: the gold as a commodity valued for export or for melting pot, is exactly of the same value as the gold coined. The hammering of a sovereign into a shapeless piece of gold has no effect upon its value. In other words the sovereign derives no part of its value from its being *coined* gold.

The arguments urged in 1816 for establishing this parity between coined and uncoined gold appear to have been: (1) if the expenses of coinage were deducted the measure of value would not be perfect—the sovereign would have one value in this country, a less value abroad; (2) traders needing to export coin would lose the cost of coinage, and to recoup themselves would raise the price of imports; (3) it would be necessary to reduce the weight of the coins, and would therefore entail a recoinage of the older coins. It is probably a very real advantage for a country like the British Isles, where foreign trade greatly affects all classes, that the public should bear the expense of coinage. Before the withdrawal, permanent probably, of gold from circulation, the State even undertook to bear the loss of gold through wear (abrasion): light coins upon reaching the banks were retired and sent to the Mint for melting.

The absolute parity between specie and bullion is not quite attained. For a loss of interest would be entailed through waiting for the coinage of the gold. In practice, therefore, the holder of bar gold sells it to the Bank of England or in

Price of
Waiting.

the market. The Bank Charter Act of 1844 requires the Bank to purchase at a minimum rate of £3 17s. 9d. an ounce. The difference from the Mint price is, supposing the period of waiting to be three weeks and the rate of interest 6 per cent., less than half the interest that would be lost.

By its imprint upon the gold coins the State guarantees their weight and their quality to be what the Coinage Laws decree. The value is left to take care of itself: the value of 40 pounds' weight of sovereigns is the same as the value of 40 pounds' weight of gold 22 carats fine, destined to be turned into watch-cases, or rings, or bracelets. Gold is a commodity valued for other purposes than as the money material; and as with other commodities, its value is determined temporarily by supply or demand, permanently and in the long run by difficulty of production.

It is otherwise with our silver and bronze currency.

The State guarantees its *value*. The value, in other words, depends upon the *fiat* of government. The weight and quality are not material, either may change without affecting the value. When in 1920 the half-nickel, half-silver, coinage was issued, a florin still retained the value of a tenth of a sovereign. In other words, our subsidiary—*token* or *representative*—coinage has value independent of weight and quality. It circulates as definite parts of a sovereign. A sovereign contains a sovereign's worth of gold, a shilling contains usually much less than a shilling's worth of silver.

Calculate this for instance: our Coinage Laws direct that a pound troy of the silver and alloy shall be turned into 66 shillings; the price of silver per ounce is almost 3s., nickel is perhaps 1d. an ounce; what will be the gain

to the Mint in coining a pound's weight of shillings? Evidently an ounce of the mixture costs 1s. 6½d., presuming that half is silver, half nickel; and a pound therefore 18s. 6d. Turned into coins, however, it becomes worth 66s., a gain of 47s. 6d. This great discrepancy was not contemplated in the Act of 1816, which decreed that henceforth silver should be only token money: an ounce of silver was then 5s. and it was to be coined, as still it is, into 5½ shillings a gain to the Mint, after deducting brassage, of 6s. as against our 47s. 6d. When we consider, too, that the silver coin has lost sometimes a great amount, always a little amount, of its weight by abrasion, we see clearly the merely representative character of the coin. This gain on the token coinage is an accession to the public funds (to the State). It obviously exceeds the expenses of coinage—expenses that are technically known as brassage, and to the extent that it exceeds these expenses it is a seigniorage, a perquisite of the overlord—in our case of the State. There is no seigniorage on the gold; on the contrary, there is a loss to the public every time gold is coined. There is, however, a considerable seigniorage on the silver and bronze coinage; and the Treasury Notes issued during the War Period (1914-1918) and afterwards, were practically all seigniorage. Or, if you prefer this way of looking at the matter, the Treasury Note was a hundred per cent. alloy.

In order to preserve the gold standard, it is obviously necessary to restrict coinage of silver and bronze. The State reserves to itself the coinage, issuing the token coins in accordance with the demands of the bankers, who interpret the requirements of the public. These token coins are made for the convenience of the public; and they retain their value only by an artificial scarcity. Restriction therefore is inevitable.

The power to release from debt, however great, belongs to gold alone; we say that gold is legal tender to any amount. And Treasury Notes, representing gold, enjoy the same privilege. Silver is legal tender to the extent of forty shillings. Bronze is legal tender to the extent of a shilling. The sovereign is current so long as its weight does not fall below $122\frac{1}{2}$ grains; the silver coins so long as the impressions upon them are recognisable.

The State's imprint, we have said, guarantees the weight and the quality of the gold coins issued from the Mint. The public, however, has a protection—against the Government, as well as by the Government—against false money; a jury of business men tests the coins (see p. 65). The deviation allowed from the weight decreed is only two-tenths of a grain: the Mint does not issue a sovereign lighter than $(123\cdot27 - \cdot2)$, nor heavier than $(123\cdot27 + \cdot2)$ grains. We are told that the Mint works well within this allowance, or *remedy*. The remedy or allowance in regard to quality is $\cdot002$, two parts in a thousand: thus, since 22 carats gold fine means 22 parts fine out of 24, or $916\frac{2}{3}$ parts out of 1,000, a sovereign would not be issued with less than $914\frac{2}{3}$ parts nor more than $918\frac{2}{3}$ parts of pure gold.

Even though the gold is hardened by alloy there is some slight loss by abrasion, by constant use; and unless preventive measures were taken in time our standard currency would become too light to be current. What steps are taken to defend the currency? Banks are the natural and obvious agents for protection. For all the currency becomes involved in the operations of the banks: retail dealers send to the bank their daily receipts, and employers draw out cash for their wages payments. There is continual passage

Legal
Tender.

Possibility of
Deterioration.

into and out of the banks; and the banks have their weighing machines that automatically ascertain light coins. Such are sent to the Bank of England for re-minting; and the loss upon these coins is borne by the State, by the public at large as it should be, not as it used to be (before 1891) by the unlucky last holder. Probably, as a result of this acceptance by the State of the obligation of protecting the currency, our gold coins were in 1914 nearer to what the Coinage Laws decreed than were those of any other commercial people. The expense entailed in assuring an accurate measure of value is as abundantly justified as that entailed in maintaining an accurate system of weights.

Our system of metallic money possesses almost perfectly those two desirable properties of money: (1) there is certainty in the definition of the standard (we know its precise weight and its precise material); (2) there is certainty in the medium of exchange which conforms to the standard (the actual medium is either a coin defined as the standard; or one having a definite ratio to it, $\frac{1}{20}$ th or $\frac{1}{240}$ th; or paper representing a defined number of the standard). How ill an effect upon trade even a temporary departure from certainty produces we have learnt well enough from recent experience.

Consider this question of legal tender a little further.

Legal Tender
(*Cours forcé*). In order that there shall be certainty in the interpretation of contracts, in order that every man shall know exactly what he is to receive or to give, all civilised communities have been called upon to state clearly what is to be looked upon as lawful money. What exactly is meant by saying that gold is legal tender to any amount (or the French counterpart that gold coin and silver five franc pieces are *cours forcé* to any amount)? It simply means that the offer (*tender*)

of such lawful money by a debtor to his creditor is a good defence in an action for payment brought by that creditor. Whatever the law decrees may be legal tender: the debtor may legally tender such currency to his creditor in payment of his debt; and the creditor is bound to accept the same, and may be held to such obligation in the courts. One definition suggested of money was, you remember, "whatever the State declares shall release from debt."

The refusal of the offer of legal tender does not, indeed, discharge the debtor, cancel his obligation. The debtor is bound "to find out the creditor and pay him the debt when due." If the creditor refuses the payment tendered, still the debtor must continue ready and willing to pay the debt; and if he is sued he must pay his money into Court. If the Court decides that the payment is in legal tender and of the required amount, the debtor wins his case; the creditor obtains what is paid into Court but must bear the costs (including the debtor's cost of defence) of the action. The tender must be in money, produced and accessible to the creditor. It need not be the exact sum due, it must, however, be a sum such that the creditor may take his due without being called upon to give change: offer of a five pound note with a request for change in payment of a debt of three pounds odd has, for instance, been held not a good tender.

Our Government, like most governments, decrees what shall be regarded as legal tender, and itself provides part of it. The rest, the Bank of England notes, is provided by an institution closely connected with the Government.

The Coinage Act, 1870, enacts that the coinage of the Mint shall be legal tender: gold coins, to any amount; silver coins, up to forty shillings, but to no greater amount; bronze coins, up to one shilling, but to no greater amount. The Bank of England Act, 1833, enacts that Bank of

England notes are legal tender for any sum above £5, so long as the Bank of England continues to pay its notes in legal money, and except by the Bank itself. The careless phrase in the Act, "any amount over £5," has suggested to some that though a debt of £5 0s. 1d. could be discharged by tender of a five pound note and a penny piece yet the offer of a five pound note is not a good tender for a debt of £5. We may, however, take it that the Legislature could have no intention of thus limiting the debt-freeing power of the five pound note. In any event, the point is hardly likely to rise: no one will refuse the five pound note in discharge of his debt. The Currency and Bank Notes Act, 1914, makes £1 and 10s. Treasury notes legal tender for the payment of any amount.

The 1870 Act, "An Act to consolidate and amend the law relating to the Coinage and Her Majesty's
 1870 Coinage Act. Mint," is the chief regulation. It gathers up previous enactments and is only slightly modified by later enactments; in essential properties our coinage is what that act enjoins. The Mint alone is authorised to coin. The gold coinage is to be both free (people can take to the Mint as much gold as they please) and gratuitous (there is to be no charge for coining): "Bullion shall be assayed and coined and delivered out, without any charge for such assaying and coining, or for waste in coinage." If one should take bullion of more than the standard fineness to the Mint, he has to obtain "such additional amount of coin as is proportionate to such superior fineness." In effect, however, the owner of bullion does not take it to the Mint; he takes it to the Bank of England which (by the Act of 1844) is obliged to buy standard gold at a minimum of £3 17s. 9d. an ounce. The Bank Price for gold is, you note, less than the Mint Price; but since the money is immediately avail-

able and the coins from the Mint would be available only after some weeks, sale to the Bank is the more profitable way of disposing of one's gold.

Lawful money—"legal tender"—was defined by this Act. "A tender of payment of money, if made in coins which have been issued by the Mint in accordance with the provisions of this Act, and have not been called by any proclamation made in pursuance of this Act, and have not become diminished in weight," is legal tender

if in gold to any amount

if in silver to 40s. but for no greater amount

if in bronze to 1s. but for no greater amount.

A careful schedule showing the weights, the qualities, the least current weight, the allowance (or remedy) allowed to the Mint for possible deviation from the standard laid down, was attached as part of the Act. The "Trial of the Pyx" (see Appendix IX.) was ordained that the public might be protected against the Government as well as by the Government. Contracts to pay money were to be made in the coins authorised by the Act. Our Act, you note, restricts the power of silver to release from debt. Contrast this with the French system. There silver coin circulates on a par with gold; five franc silver pieces are legal tender to any amount. But the parity is maintained because the State *guarantees* the parity; and because the issue of silver is restricted, and is not free. Any deficiency in value is thus offset (1) by the credit of the State, (2) by an artificial scarcity.

The section that gave rise in many instances to hardship was that which called upon the public to constitute itself the protector of its gold coinage. Any one to whom was tendered a gold coin that had become deficient in weight

was to break or deface it, the person tendering bearing the resultant loss. The last holder of the coin bore therefore loss by abrasion, by the public use. One may well imagine how greatly this proviso retarded the free circulation of sovereigns and to what contentions it must have given rise. It was this section that the Act of 1891 was passed to modify.

The schedule in the 1870 Act relating to the gold coins is still in force:—see Table on opposite page.

The Act of 1891 was to amend the Coinage Act of 1870.

It imposed upon the State the duty of maintaining the currency at full weight. The chief section is: "Coins not called in and below current weight (as laid down in the Act of 1870) shall, if not illegally dealt with, be exchanged or paid for by or on behalf of the Mint at their nominal value." A sum is set aside from the Consolidated Fund to allow for the loss caused by the recoinage. The Act lays down clearly what shall be regarded as fair wear and tear: "Loss of weight greater than three grains shall be *prima facie* evidence that the coin has been impaired, diminished, or lightened otherwise than by fair wear and tear."¹ The banks now look after the soundness of our currency; and there is no reason, you note, why the duty imposed shall be neglected. Nothing is gained by retaining the heavy coins, and dispatching the light ones again into circulation.

The monetary troubles incident upon the outbreak of war in the August of 1914 led to emergency measures for replacing the gold currency called in to strengthen the reserve against possible shocks. The French, more provident than we in

The Act of
1891.

The Act of
1914.

¹ In practice the Bank of England, therefore, took light coins (up to 3 grains short) at their nominal value: after three grains short it made a charge of 2d. a grain, this being about the value of a grain of gold.

Denomination of Coin.	Standard Weights.		Least Current Weight.	Standard Fineness.	Remedy Allowance.	
	Imperial Weights Grains.	Metric Weights Grams.			Weight per piece. Grains.	Millesimal fineness.
Gold						
Five Pound	616·37239	39·94028	614 50000	39·68935	1	·06479
Two Pound	246·54895	15·97611	245·00000	15·87574	·4	02592
One Pound	123·27447	7·98805	122·50000	7·93787	·2	·01296
Half Sovereign	61·12500	3·99402	61·12500	3·96085	·1	·00648

In the 1891 Act the Remedy Allowance for the half-sovereigns was increased as regards weight to ·15 and ·00972. In practice the sovereign and half-sovereign were the only gold coins current, the larger denominations being coined only on special occasions.

The Silver coins authorised were the *Crown*, *Half-Crown*, *Florin* (a result of the agitation of the Decimal Association), *Shilling*, *Sixpence*, *Groat* or *Fourpence*, *Threepenny-piece*, and *Penny-piece*. Of these the *Crown*, *Groat*, *Twopenny*, and *Penny-piece* hardly entered into the currency. The Bronze coins were the *Penny*, *Half-penny*, and *Farthing*.

this matter, had already made their emergency currency. On the 6th of August there was passed the "Act to authorise the issue of Currency Notes, and to make provisions with respect to the Note Issues of Banks." Under this Act there were issued, under the authority of the Treasury and from plates prepared by its direction, currency notes for one pound and for ten shillings. These Currency Notes were to be Legal Tender in Great Britain and Ireland for any amount. They were not, as is apparently sometimes thought, inconvertible notes. They were in fact made as readily convertible as a Bank of England note: "The holder of a currency note shall be entitled to obtain on demand, during office hours at the Bank of England, payment for this note at its face value in gold coin which is for the time being legal tender in the United Kingdom." Certainly we had "propaganda" asking the public not to cash the notes; and certainly there were practical difficulties in the encashment. The notes were, however, always perfectly convertible. The currency notes recall, practically are indeed, the bank notes of small denominations that were forbidden in 1826, following a series of bank failures; and they will probably be superseded by new pound and ten shilling notes. The currency notes are, the Act enacts, to be regarded as *bank notes* (within the meaning of the Forgery Act of 1913) as *valuable securities* (within the meaning of the Larceny Act of 1861), and as *current coin of the realm* (within the meaning of the Truck Acts). That is, an imitation with intent to deceive is punished as forgery; they are valuable property in themselves, and therefore can be subject to theft; they can be used in the payment of wages just as coin of the realm can.

For obtaining an additional supply of legal money in time of need the Act supplied a machinery much simpler

than the old one of obtaining an Act of Indemnity. (See "Suspension of the Bank Act.") The authority of the Treasury is enough to allow the issue of notes in excess of the minimum authorised by the Charter Act of 1844. "The Governor and Company of the Bank of England and any persons concerned in the management of any Scottish or Irish bank of issue may, so far as authorised by the Treasury and subject to any conditions attached to that authority, issue notes in excess of any limit fixed by law."

The alteration in relation to the token silver coins was due to the strange and quite unexpected course of silver prices during the War years.

The Act of
1920.

At times the silver tokens were actually more valuable as metal than as coins; to hammer a shilling into a shapeless mass would at one period have added to its value. After all, it does not matter a great deal what value of metal we put into a token: provided that people have confidence in the guarantee of the issuing authority, and provided that the danger of counterfeit coins is, so far as can be, avoided, any material will serve the purpose. The first proviso is well enough obtained among us; probably there never has been a community in which the mass of the people have been so whole-heartedly behind the Government of the day, eager to help forward any Government schemes. We are a people most amenable to reason, and therefore the most easily governed in the world. Confidence in the Government's guarantee is therefore universal.

The second proviso is more difficult to obtain. Clearly, the greater the discrepancy between the value of the coin as metal and as currency the greater the incentive to illicit coining; to make coins even of sterling metal is profitable. The problem facing the Mint is therefore so

to perfect the art of coining that the imitation of good coins is rendered a matter of exceeding difficulty. Just so, you note, the Treasury is faced with the same difficulty in regard to the Currency Notes: the possibility of forgery is always present, and this possibility is increased as the notes in the hands of the people become dirty and crumpled. Both the counterfeiting and the forgery are criminal acts visited by severe penalties; but experience has shown how ineffective penalties are to prevent easy illicit gains. The effectual preventive is to make successful imitation costly, troublesome, and difficult, as well as dangerous. We must perhaps acknowledge that this is attained. Our coins are covered by elaborate and sometimes beautiful designs, the milled edges make clipping easy to detect, the raised edges protect the designs so that they do not become blurred and indistinct, and the efficiency of the police may be trusted to prevent the establishment of expensive and cumbrous apparatus for counterfeiting. And our Currency Notes, at any rate when new, hardly invite imitation.

If we guard against counterfeiting, therefore, it is profitable to the community to make its coins of the cheapest material; in these days of heavy expenditure we can ill dispense with such savings as those from the seigniorage on tokens. Sentimental regrets at the relinquishing of the "ancient right standard" of silver had to give way before the economic reasons dictating the change. The Act "to amend the Law in respect of the Standard Finess of Silver Coins current in the United Kingdom and in other parts of His Majesty's Dominions" was accordingly enacted during the first part of 1920. It amends the First Section of the 1870 Act (as amended by the Coinage Act of 1891) so far as the fineness of the silver is concerned. The $\frac{37}{40}$ th of the earlier acts was to be replaced by "one-half of fine silver, and one-half alloy; or

millesimal fineness, 500." For the millesimal fineness in the remedy allowance 5 was to be substituted. The standard trial plates for the trial of the pyx were to be made of pure silver; so that a plate should contain as much fine silver as double its weight of the new shillings and half-crowns.

The composition of the alloy has never been laid down by statute: it has seemed good to leave the Mint authorities free in the matter. Careful experiments in the laboratories on Tower Hill seem to have established the fact that a ternary alloy (of silver, copper, and nickel) is better than a binary one (of half silver, half copper). The binary alloy is slightly copper tinged; the addition of nickel restores the whiteness. Silver coin is always sent out "blanched" or "pickled"; covered, that is, with a coating of pure silver. The underlying alloy must, therefore, be of the silver colour. If not, when the coins began to wear, the raised parts would differ from the protected parts; and the public would suspect counterfeiting. The coins would then ill perform their function as mediums of exchange; for, in order fully to do this work, they must be taken readily, without suspicion and without elaborate testing, with at most such slight inspection as ignorant and inexperienced people can give. The new coins contain actually 500 parts silver, 400 copper, 100 nickel.

This Act of 1920 is, indeed, notable in that it constitutes a departure from the "ancient right standard" of silver. Except for a short period of debasement in Tudor times—a debasement rectified by Elizabeth and her able advisers in 1560—there had been a remarkable continuity in the quality (11 ounces, 2 pennyweights of fine silver to 18 pennyweights of alloy). The quality persisted from the Conquest through all the successive diminutions of weights.

When metal corresponds to the standard laid down for our coins it is said to be *sterling* (or *esterling*): sterling gold is eleven-twelfths fine, and sterling silver is presumably nowadays half silver, half alloy.* Possibly, as showing the intimate connection between money and trade, the word comes from *easterlinge*, early Saxon traders.

We may note that the Indian Government adopted a different method of making the silver coin, enhanced in value as it was, into a token only. It maintained the rupee at the old standard, both of weight and fineness, but enacted that ten instead of fifteen should be regarded as the equivalent of the gold sovereign. It would seem that the conservative disposition of the people—of “the unchanging East”—prevented the possibility of any change that would be at once apparent to the mass of the people. The merchants could be trusted to look after themselves. The token silver coin was therefore kept intact in weight and fineness. The currency standard itself was altered; and India still remained in the curious position of having a silver currency based on London gold, the standard not being represented by any full weight coin. The main recommendations of the Indian Currency Committee of 1920 are the following:

(i) That the present rupee, unchanged in weight and fineness, should remain unlimited legal tender.

(ii) That the rupee should have a fixed exchange value, and that this exchange value should be expressed in terms of gold at the rate of one rupee for 11·30016 grains of fine gold, that is, one-tenth of the gold contents of the sovereign.

(iii) That the sovereign, which is now rated by law at rupees 15, should be made legal tender in India at the revised ratio of rupees ten to one sovereign.

(iv) That the import and export of gold to and from India should be free from Government control as soon as

the change in the statutory rates has been effected, and that the gold Mint at Bombay¹ should be open for the coinage into sovereigns of gold tendered by the public.

(v) That the notification of Government undertaking to give rupees for sovereigns should be withdrawn.

(The interesting question of the Indian currency is discussed at some length in an Appendix.)

Our own monetary system is in like manner a *credit system based on gold*; and though we may occasionally see a sovereign, the standard coin, our standard coin is not in effective circulation.

¹ We should note that our Mint has Branch Mints at Sydney, Melbourne, Perth (Western Australia), Ottawa, and Bombay. Sovereigns coined in these Mints may be recognised by the Mint marks, on the reverse side above the date. These marks are S, M, P, O (for Canada), and I (for India).

CHAPTER IV.

CURRENCY DETERIORATION:

ITS CAUSES, MEASURES, REMEDIES.

So long as the gold sovereign, which is our standard of value, does not circulate, the question of deterioration is less urgent. And, even before 1914, the Act of 1891, enacting that the loss on coins worn by fair usage should be borne by the State, was effective in preserving our currency sound. Abrasion there was, of course; but when, in the course of business, the coins reached the Banks, they were if too light automatically retired. They were sent to the Mint and melted for fresh sovereigns.

The ancient fraud of clipping is not to be apprehended; we are told though that sometimes even now dishonest workers in gold will "sweat" the coinage. They will obtain a supply of newly issued sovereigns, will shake them vigorously in a leather bag, and will make a considerable gain by collecting the resulting dust. "Garbling the coinage," selecting for export or for the melting pot the heaviest coin, is also bound to have had an effect in making the gold coins tend towards lightness. Nor can such a practice be stopped, or indeed regarded as very blameworthy: for foreign payments the sovereigns pass by weight not by tale; and the working jeweller is entitled to his full weight sovereign. We shall, however, not again see an actual gold currency; the link between gold and

paper will be afforded by the ease with which bullion can be received from the Mint for export or for working. The problem of deterioration of the gold will, therefore, be solved. Provided that the link between gold and paper is maintained intact, none need complain. War conditions have taught people to be content with paper; and there is no reason why the State should forego the saving from not coining gold.

The silver currency loses its weight, too; and there is no very effective way of guarding against the loss. Nor is the question a serious one.

Light
Silver.

For the silver coinage is merely subsidiary, merely token coinage; and the value in relation to gold is maintained by limitation of issue. We must note this, however: the great difference between the value of a silver coin as currency and as metal gives a corresponding incentive to illicit coining. Certainly we have severe penal laws against tampering with the coinage. The Act of 1861, codifying penalties for offences against property, states: "Whoever impairs, diminishes or lightens current gold or silver coin, with intent to pass the same, is liable to penal servitude for from three to fourteen years." "Whoever has in his possession filings or clippings is liable to the same punishment." The tendering or uttering false gold or silver coin is also punished.

Worn subsidiary coin is withdrawn by the Banks: in 1920 £602 worth of bronze coins were withdrawn by the Mint. The Coinage Acts, too, give power to the King by proclamation "to call in" currency; and the power is exercised at convenient times—at the beginning of a reign, for example. Then, perhaps, coins issued during the reign before the one just completed may be called in. For a certain period such coins will be taken at their nominal value at the banks and post offices. After that

definite period has passed they are no longer current; they are worth only what the metal of which they are composed is worth. The Mint accepts from the banks, through the Bank of England, small quantities of worn silver at the nominal value.

That some remedy against the inevitable loss of weight in wear is necessary we may see when we consider the following figures. Careful and exhaustive investigations by the Mint Authorities upon the life and wear of silver coins have established the following facts:—

Average ages at which silver coins reach the stage of illegibility, i.e. when they are no longer current.

Half-crown	...	...	...	64·66 years
Florin	...	...	...	45·41 „
Shilling	...	...	...	41·61 „
Sixpence	...	...	...	28·22 „
Threepenny-piece	...	...	...	32·76 „

The life of the larger coins is longer than that of the smaller, except that the threepenny-piece lives longer than the sixpence. The sixpence obviously is very much more used than the too tiny threepenny-piece.

So, too, it is estimated that the average time a sovereign circulates before it becomes underweight is 24 years; of a half-sovereign, 15 years.

The necessity of preventing the currency from deterioration is the more urgent from the fact that, once it becomes evident that some portion of the currency is inferior either in weight or in quality, the evil rapidly spreads through the whole. We have already noted in Chapter I. a striking illustration of this. The rapid disappearance of gold coins, as Treasury Notes appeared during the War, supplies another illustration. The tendency, to which the name “Gresham’s

Gresham’s
Law.

DEFERENCY DETERIORATION.

Let "C" applied, may be stated thus: the better money tends to be driven out of circulation by the worse. If we have a choice of methods for effecting the same purpose, we naturally choose the easier, cheaper method: if the penny *Daily News* satisfies me just as well as the three-half-penny *Times*, I buy the former; if a light coin frees me from debt as effectively as a heavy coin, I use the former. I reserve the latter for purposes in which its greater weight is an advantage—for melting, perhaps, or for payments abroad, when coins are weighed, not counted (when they pass not by tale but by weight). (a) When paper representing gold but not readily transferable into gold (inconvertible paper) circulates along with gold, the latter tends to disappear. For the gold can effect what the paper cannot; both may, indeed, be legal tender; but no government decree can make the paper universally acceptable abroad, nor capable of transformation into bracelets or rings. For a single purpose the gold and the paper have equal power; for a purpose other than the freeing from debt, the paper is inapplicable. Theory therefore teaches—and practical experience abundantly illustrates the teaching—that the coin will be diverted to the purpose for which it alone is suitable.

Suppose that in a country employing £100,000,000 of gold coins there was a sudden issue into effective circulation of inconvertible notes to the nominal value of £50,000,000. Prices would rise as the quantity of money increased; and with them the price in the market of gold. An ounce of gold could be sold to the goldsmith for more than it could be sold to the Mint, and no amount of penalty would effectively prevent its withdrawal from the circulation till in the end £50,000,000 in gold would have disappeared and paper taken its place. Withdrawal would now cease: for, since prices would resume their former level,

there would be a re-establishment of the market price of gold and there would be no incentive to the melting or the exportation of gold coin.

(b) Similarly, when part of the currency is below standard; this part will remain in circulation where the greater use can be made of it. That up to standard will have a tendency to disappear to where its superiority obtains for it an advantage. If a jeweller wants gold to work into ornament or plate he will be careful to select full-weight coins; if a merchant is constrained to send gold abroad, he too will select full-weight coins.

(c) Again, when in a bimetallic system, one metal is unfairly treated in the fixing of the ratio, the undervalued metal will tend to disappear. The Government will have an interest in making coins of the metal that, taking the established ratio into account, is the cheaper. So long as the monetary ratio between the metals corresponded with the market ratio, the system even in an isolated country would work well enough. Neither debtor nor creditor would need to trouble about the particular metal in which payment was made. With a bimetallic union of the chief commercial nations of the world, the maintenance of the required correspondence might be assured. It could hardly be so within a single country; and the least disturbance would drive out the metal that had relatively risen in value. Suppose now in the metal market silver falls in relation to gold, so that the Mint treatment of silver is more favourable than the market treatment. No one would take gold to the Mint; he would sell it and buy silver for coinage. And, presuming that no charge was exacted for coinage, it would be profitable to melt the gold and again exchange for silver.

If, however, a wide area adopted the double standard there would, say the bimetallists, be no danger of disturbance in the fixed ratio. Suppose silver were mined at less expense—so that the silver brought out of the mine more than compensated for the gold put, in the form of wages and other expenses, into the mine. There would be a tendency to coin silver rather than gold, and some of the least productive gold mines would cease working. But the undervalued gold has nowhere to resort to in order to obtain more favourable terms. The increased demand for silver coupled with the decreased supply of gold quickly restores the ratio disturbed; the marginal amount of silver produced would be produced at the fixed proportion of cost of the marginal amount of gold produced.

We have in our monetary system a curious survival of the quite justified suspicion business men had of State Officials. This is what is known as "The Trial of the Pyx," whereby a jury of London merchants ascertains, and certifies to the world at large, that the gold and silver coins issued from the Mint are exactly in accordance with what is laid down in the Coinage Laws. The Pyx is the Chest into which specimens are placed of every batch of gold or of silver coins minted; trial plates are kept; and at least once a year the jury, being sworn and having thoroughly satisfied themselves, declare that the Mint has kept well within the "remedy allowance" prescribed, both as regards quality and weight. The Act of 1870 directs: "For the purpose of ascertaining that coins issued by the Mint have been coined in accordance with this Act, a trial of the pyx shall be held at least once in every year in which coins have been issued from the Mint." The jury shall be "of not less than six out of the competent freemen of the mystery

of goldsmiths of the city of London, or other competent persons."

Of the gold coins, one is taken out of each 2,000 ready for issue; of the silver coins, one is taken out of each "journey weight" of 60 lb. troy. They are sealed up in separate packets at the Mint before being taken to the trial; and they must be produced thus sealed up.

The actual trial is an elaborate one. The jury, chosen from the Goldsmith's Company of the City of London, upon writ by the King's Remembrancer, makes certain that the coins correspond in number with those sealed up and selects from each packet as many as is thought necessary for the purposes of the trial. The coins are carefully weighed, and some of them are melted and assayed. The verdict of the jury as to the goodness and weight of the coins is written down by the King's Remembrancer or by the Master presiding. It is authenticated by being read aloud to the jury and is signed by all. The writing is deposited with the Mint Authorities and the finding is published in the *London Gazette*. (See Appendix.)

We may take it that the measures adopted among us for preventing a deterioration of the coinage are effective. Our coins have the characteristics that an old authority calls essential: they have:—

- a fixed weight,
- a definite quantity of alloy,
- an authorised impression,
- a fixed valuation in relation to the standard unit of currency,
- a currency not terminated by the king's proclamation.

Being under a single gold standard we have no concern with the possible deterioration of the currency through the

drop in value of one of the metals constituting a double or multiple standard. Deterioration through the excessive issue of paper is dealt with in Chap. VIII.

We had as a result of the extraordinary conditions of war time a most curious phenomenon of such an amelioration of part of the currency that steps were necessary to depreciate that part. Silver in Great Britain itself, issued as a token coin in the expectation that it would circulate at a higher valuation than the metal contained in it actually became more valuable as metal than as coin. A shilling being melted down would command in sale more than a twentieth part of a pound; and we may assume that there were not wanting many who made use of this knowledge. The issue of paper currency had lowered the purchasing power of a pound; the rise in the value of silver, arising especially from the eager demand for silver among the multitudes, in India and China, in France and even in our own country, who preferred "hard money," made the silver in the token coins overtake and surpass the nominal value. In ordinary conditions, though a sovereign contains a sovereign's weight of gold, a shilling contains less than a shilling's worth of silver. In those extraordinary times the shilling contained more than a shilling's worth of silver.

We adopted, as a measure for combating the difficulty, the diminishing of the silver in the token coins.

CHAPTER V.

MONETARY STANDARD: BIMETALLISM.

The real money of a people need not correspond to the money of account. It did with us before the War; for the sovereign was both a real money and a money of account. In France, however, the money of account is a gold franc, which is not coined; in America, it is a gold dollar, which is represented by a paper note. The real money is the material piece of metal that the debtor hands to his creditor. It enables exchanges to be made. The money of account—or bank money—serves to assess the value of exchangeable goods. It enables ready comparison to be made.

Practically the whole commercial world has now decided that, though its real money may be of any material, its unit of value shall be a definite weight of gold. The will of the Government—its fiat—decrees whether in the country concerned substitutes for gold shall be taken as the equivalent of gold. The real measure, to which all these substitutes have reference, is a weight of gold. Only faint echoes of the once loud contentions over the monetary standard—gold? or silver? or gold and silver?—are nowadays heard. China itself is for practical purposes under the gold system: her silver is taken and paid

for at a gold valuation: a clerk going to serve in Shanghai will sign a contract whereby he is to be paid so many taels (*i.e.* Chinese ounces, equal to about $1\frac{1}{3}$ of ours) at a fixed valuation, of 3s. 6d. perhaps. And we may anticipate that, when the at present inchoate republic devises for itself a national coinage—as distinct from the primitive means of exchange at present in use—it will adopt as its unit of value and money of account a fixed weight of gold. It will imitate Japan; and we shall not have then the antithesis between the white man with his yellow money and the yellow man with his white money.

Yet, though the one metal, gold, is the standard, it is an obvious convenience to have subsidiary metals. A golden penny would be less than half a grain in weight, and would be altogether unavailable for the work of small exchanges. Cheaper metals must be used; the scarcer and more valuable serves for big payments, the more abundant and less valuable for the minor transactions of daily life. We are probably right in assuming that, from the earliest development of exchanges, there were soon such alternative methods of payment. The practical question would then be: how much of this commodity shall be looked upon as equal in value to so much of that? how many sheep shall we regard as worth an ox? how many oxen to one slave? And when metals of various values came, as was inevitable, to be the usual medium of exchange, the question would become more definite: how many ounces of silver ought we to give for an ounce of gold? how many ounces of copper for one of silver? Later, when it was seen that—since the cost of production of the metals varies in relation to one another—a fixed ratio was impossible to maintain, another question arose: can we fix on one metal as a standard and use the other metals in

Subsidiary
Coinage.

another way? We, first of the business communities, decided in 1816 that we could thus adopt gold as our single standard, and relegate the less valuable metals to a merely subsidiary place. The silver and bronze coins became representative, tokens, of gold; they were bank notes made of more valuable material than paper.

Early decrees regarding money dealt with one metal only. The other metals, when these circulated, were commodities commanding now more now less of the standard money metal. **Early Attempts at Tariffing.** Gold was such a commodity when it first became at all common among us. During a long period, when we lived under the reign of the silver pound and the silver penny, we had no national gold coinage, and the gold bezants (struck in Byzantium) were sold by weight. We are told by Mr. Kenyon, in his *Gold Coins of England*, that the first gold pennies were issued by Henry III. in 1257. Proclamation was made that they should be current in all transactions at the rate of twenty sterlings (silver pennies) for every gold penny. A comparison of weights gives the rates of the value of gold to that of silver as 10 to 1. You will notice that the present valuation, taking silver at 30d. an ounce, is as £3 17s. 10½d.: 30d., or as 26 to 1.

The whole history of our coinage, during the period when gold and silver circulated together, is a repetition of the breakdown of the ratios proclaimed; and the single standard is justified by appeal to past experience as it is to sound reasoning. The great advantage of a single standard—of *monometallism*—is its simplicity. Estimate the value of standard coin as that of the metal contained in it, and we are exempt from the arbitrary decisions of governments. There need be no decisions at all. Cer-

tainty in relation to the standard is obtained; and we wish to be certain about our unit of value for the same reasons as we wish to be certain about our units of length and of weight. Everyone understands a definite weight of a definite thing. The idea of a comparison of values is more difficult. And as in our currency system we work down to a minimum of actual metal, we need not trouble about the problem that once seemed great—the problem of obtaining enough of the single metal to keep pace with the growing trade of the world.

Our method of dealing with the money metals is certainly intelligible, and it does not lead to false positions (as the French method, for instance, does). We assign to gold unlimited power to free from debts; we allow gold to be minted to any extent: we put into our coins metal of the exact value of the coins. The silver we make token money. In the first place we restrict its coinage; one possessed of silver cannot have it turned into coin, as one possessed of gold can; and the Mint coins silver only in response to the demands of the banks. In the second place we limit its power of relieving from debt. And, most effective of all devices, we assign to the coins a value considerably greater than the value of the silver or bronze contained in the coins.

The French method is a compromise adopted in order to disguise their desertion of the bimetallism to which they were pledged. The five franc silver pieces have, like gold, unlimited power of freeing from debt (unlimited legal tender). But their issue is restricted. And the smaller silver coins are legal tender only to the extent of change for the five franc pieces. It is, therefore, a limping standard (*étalon boiteux*), one leg quite sound, being of gold; the other, maimed and distorted, of silver.

The essence of bimetallism is this: once a ratio has been fixed, that of $15\frac{1}{2}$ to 1, for example, Bimetallism. as in France before the breakdown of the system, the two metals shall be on an equality. Both shall be freely received for coinage; both shall have unlimited legal tender—the debtor at his option shall pay in whichever metal he prefers, or in whatever proportions he pleases. Is it possible to maintain a fixed ratio? Must one metal always become over-valued and so drive out the other?

In 1666, we ourselves tried, by abolishing the seigniorage on both gold and silver, to give equal currency to both. Either gold or silver could be taken to the Mint, and the full value be received in coins. The action of Gresham's Law became only the more rapid and effective, since nothing was lost by minting metals. It has been shown again and again that in a single country a fixed ratio must break down. The argument of the bimetallists is that, since the chief use of the precious metals is for coin or bank reserves, the very fact of an agreement on a large scale would maintain the ratio established. If gold became more easily obtainable from the mines, less silver would be coined or taken for reserves. There would, however, be no place where the undervalued silver could obtain more favourable terms; and the ratio would speedily be restored. The increased seeking of gold for minting would raise its value compared with silver; the diminished seeking of silver for minting would lower its value compared with gold. Doubtless this argument—the compensatory action of the double standard—is well grounded. But one can easily see that a way is open to bitter controversies. One country having control of silver would be inclined to over rate its exchange power over gold; the gold controlling countries would desire better

terms for their metal. It is probably unwise to increase the occasions for international strife.

That even a single important commercial community may do much to stabilise a ratio between the two metals is certain; if Britain, the U.S.A., and the Latin Union were to agree, we should probably have an absolute stability. Whether the effort to get such a stabilising is worth while is another question. We have now a simple and satisfactory system, and mere theory should not impel us to change it. Writing in 1876, Mr. Bagehot declared that if the Latin Union had kept their Mints open to the unlimited coinage of both gold and silver, even the great disturbance caused by the German sales of silver and purchases of gold would have caused a scarcely observable variation from the 1 to $15\frac{1}{2}$ ratio. "The States comprising the Latin Union in 1873 adhered strictly to the principle of the double standard of gold and silver—that is, they allowed anyone to bring to the Mint any quantity of either metal, and they coined it for him. In consequence, at every change they were always coining the metal of lesser value, and that metal when coined was used to buy and take away the metal of higher value. In this way during the cotton famine France was half-emptied of silver, which was wanted for export to the East, and was filled with gold, which was not so much wanted. If these States had continued to adhere to this principle, the great effect on the general silver market produced by the German operations would have been much diminished and rendered scarcely observable. As soon as silver began to fall it would have gone to France and been used to buy gold, which had risen. Thus silver would have been taken from the general market, and gold would have been brought to it, till the former level of comparative values, or something like it,

had been reached." France and its associates in the Latin Union did not appreciate the part they were called upon to play, the part of being a parachute in order to break the fall of silver, and the free coinage of silver was suspended.

CHAPTER VI.

DECIMAL COINAGE.

The great office of money is to facilitate exchanges, in other words to enable people to help one another. **The purpose of Currency.** And that system of currency is best which enables exchanges to be accomplished with least trouble and friction. If we approach this question of decimal coinage from that standpoint we shall probably agree with the Royal Commission that reported in 1920. Constituted to consider "whether it is advisable to make any changes in the denomination of the Currency and money of account with a view to placing them on a decimal basis," it decided that the advantages claimed for the decimal system were in theory only or mainly; that for practical purposes we had evolved an admirable system; and that if we wished to use decimals in the keeping of accounts we could—while maintaining our present coinage—easily do so. The existing system may have defects and these are evident to all; an alternative system, however, presents itself as an ideal, and we should learn only by awkward experiences any defects. Then, as often enough in monetary affairs, "Better bear those ills we have than fly to others that we know not of."

America, which has the decimal system (or rather the centesimal) is not quite happy with it; and
 A Letter from the U.S.A. devises means of obtaining the advantages of our duodecimal system. An entertaining letter from Mr. Halsey, the Commissioner of the American Institute of Weights and Measures, is worth considering. He has very kindly given permission to quote it here. He is showing how in practice the American gets rid of the shackles of the decimal system:—"If you buy stocks through a broker, you will find that his ordinary commission is one-eighth of 1 per cent. of the par value, except that if you buy a few shares of high priced stocks, his commission will be one-quarter or even one-half of 1 per cent. while if your purchase is large enough to induce him to reduce his commission the rate will be one-sixteenth of 1 per cent. These practices are the more striking because we have a smaller unit of value than the cent—the mil, which is one-tenth of a cent. In practice, however, this unit is used only in certain tax ratings, some (not all) of our taxes being levied at so many mils on the dollar. The mil is, however, never used in commercial or financial transactions, the cent in such cases being always divided into halves, quarters, eighths and sixteenths.

Why is it, if the decimal principle is so superior, that after more than a century of experience with our currency, we depart from that principle whenever we are not bound down to it by the ratio of our basic denominations? The question is one for the decimalists to answer.

Having now examined the practice in large transactions, let us turn our attention to small ones. When we go to a shop to buy something—a cigar, for example—of which two are priced at a 'quarter' of a dollar, if we buy one we are always penalised $2\frac{1}{2}$ cents, for the price of one such cigar is always 15 cents, never $12\frac{1}{2}$. Similarly if we buy

one article of which three are priced at a "quarter," we pay 10 cents, not $8\frac{1}{3}$. The Englishman under the same circumstances pays 6d. or 4d. respectively, but he does not stop here. If the thing he buys is priced at 2, 3, 4, 6, 8, 12, 16, 24, or 48 for a shilling, he can buy any desired number up to a shilling's worth and take the exact amount of money from his pocket, or, failing that, get back the right change. We can do that for fifths and twenty-fifths of a 'quarter's' worth, but for no other fraction; and who wants fifths or twenty-fifths of anything? Many things are priced at so many for a 'quarter' dollar, the number going up or down as the price per piece goes down or up; but unless the number happens to be 5 or 25, we must buy a 'quarter's' worth whether we want it or not or submit to a petty loss. Similarly, if an article is priced, for example, at 7s. per dozen, the Englishman knows without a thought that that is equivalent to 7d. each. Compare this with the nearly equivalent value, \$1.75 per dozen, and you will see an advantage in your system which you do not realise, because it is such an everyday affair. If things were priced by tens instead of dozens we could do as you do, but things are not so priced. The dozen has the same superiority over the ten that the shilling has over the 'quarter' dollar—greater divisibility.

Your shilling is the most wonderful denominator of value in the world, while our 'quarter' is absolutely the worst. You will never know how good a thing your shilling is until you lose it. Some Englishman has called our country 'the land without a sixpence,' and to an Englishman that tells much, while to most of us it tells nothing. The franc, being divided into 100 parts, while our 'quarter' is divided into 25, the former is superior to the latter in divisibility because it can be divided by two twice, while the 'quarter' cannot be so divided even once. The franc

is, however, far inferior to the shilling in divisibility, and it is inferior to the dollar as a measure of large values, because of its small size; and by the same token the dollar is for that purpose inferior to the pound sterling. On the other hand, when divided decimally the pound will be inferior in divisibility to the dollar because the inflexibility of a decimally divided base unit increases with its size. Just as the dollar is inferior in this respect to the franc, so will the pound be inferior to the dollar. At first sight nothing seems so odd to an American as your half-crown, but on deeper insight we find that it endures because it is the eighth part of a pound, precisely as, under different names—bit, levy, and shilling (*sic*)—the eighth part of a dollar is in common use in different parts of our country, although it does not have, and never has had, a coin to represent it. On our Pacific slope they scarcely know the meaning of a 'quarter,' always calling it 'two bits.'

To sum up the comparison of systems in order of merit as measures of large values is—British, American, French; as a means of making purchases—British, French, American; and as a means of keeping accounts—American, French, British.

We find, then, that our currency is superior to yours as a means of keeping accounts, while yours is superior to ours as a means of buying and selling commodities, and saddled, as we are, with unfortunate decimal arithmetic, the wit of man cannot devise a system that is other than inferior for one or other function, between which we must choose. The quarrel over currency, like that over weights and measures, is in reality, although in disguise, a quarrel over arithmetical notation. We are saddled with a bad system of arithmetic which is out of joint with many requirements. In the circumstances we must compromise,

something must give way, and the question is—what shall it be? The metric system of weights and measures sacrifices the ordinary system of division of units, which in itself is one of the few perfect things in this world. In other words it sacrifices the essentially good for the essentially bad, so that nothing really satisfactory can be based upon it. Of currency and weights and measures alike, so long as the decimal system of arithmetic endures, a really satisfactory system is impossible. Compromise there must be, although a much better compromise than the extremely amateurish metric system could easily be devised.

If you adopt a decimal currency, you will both gain and lose. You will gain for the accountant, and you will lose for everybody else. Moreover, just as we make partial use of the decimal principle, so you will do the same. What exceptions you will make I do not know, but you will make them, because decimal divisions are fundamentally and inherently bad."

The point emphasised here is, you note, that for the needs of ordinary life our system is better than any decimal system that may be suggested. In America, as soon as they get away from account-keeping, they forsake the decimal principle. The ratios of their effective coins are two to one so that they have the Nickel (5 cents), the Dime (10 cents), the "quarter," the "half," and the Dollar. And their gold coins are the Half-eagle (\$5), the Eagle (\$10), and the Double-eagle. The escape from the decimal system of notation (imposed on primitive races because man has ten digits to count with) is, in fact, regarded by Sir E. E. Tylor as a step upward in civilisation. It is a step dictated by the need of a unit capable of division and subdivision. "The manner in which English in common with German, Dutch, Danish, and even Russian has adopted

The practical point of view.

Medieval Latin *dozena* (from *duodecim*) shows how convenient an arrangement it was found to buy and sell by the dozen and how necessary it was to have a special word for it."

The agitation for some revision of our coinage in the direction of decimalisation is of long standing. **History of the Movement for Decimal Coinage.** If only our farthing were one-thousandth ($\cdot 001$) of a pound, we should have a decimal system ready made. To obtain one as it is, however, we should need to give up the pound or the penny—either increase the weight of gold in a sovereign or diminish the token value of a penny. As early as 1824 a scheme, practically the same as that upon which the Commission was required to report, was brought before the House of Commons. This was the pound and mil scheme in which the pound was retained unimpaired, was to be divided into ten double shillings, and each double shilling into a hundred farthings. The decimalists succeeded in 1849 in obtaining the issue of a florin which since has become as familiar as our half-crown; but this is the one fruit of their labours. And in face of the adverse report of the Commission there is little likelihood of our currency system undergoing material change.

Mr. Gladstone as Chancellor of the Exchequer, and therefore in close touch with practical affairs, in his answer to a deputation from the Decimal Association (1854) summed up the matter: "I cannot doubt that a decimal system of coinage would be of immense value in momentary transactions. The weight of authority on that head is irresistible; but I do not think, when we come to the adoption of a system, that we have obtained sufficient evidence as to the sense and feeling of the country with respect to it. It is true that those people who have studied the question are gentlemen who have been more or

less actively engaged in commercial pursuits, but the public at large do not seem to be acquainted with it. It is, as you are aware, the enormous masses of the community who have immense businesses to transact that must guide the Government in the matter. They are attached to the present arrangement of the currency, as it admits of the different system of divisors, and it is the basis of all their notions of value. It has also many facilities of division, which you may lose if you abandon it. It is impossible for you not to be struck with this—an advantage which takes its origin from the number of factors which a combination of the decimal with duodecimal give rise to. With the Government it is impossible not to be so struck. Again, it is so wound up in the habits of the people that it would not be advisable to have recourse to any change in it, unless we had clear evidence that it was one the people themselves required and understood. This, too, is a question in which the mere judgment of a Minister is of no importance, and which the general feeling of the public can alone decide. I frankly own I am by no means convinced that you can get rid of the penny; but as I said just now, nothing is more unimportant on such a question than the opinion of an individual Minister. I would only ask you, are the people prepared for the change? All I say is, that I cannot take any decisive step until we are satisfied that the subject has been thoroughly sifted, and is well understood by the public."

When in 1865 the Latin Union was concluded, the question again arose. The British Government was invited by the Emperor Napoleon III. to enter the Convention, or to consider a method of linking the sovereign with the coinage of the Latin Union (a coinage ultimately based on the gold coin of the value of five francs). The Royal

The Latin
Union and
the System.

Commission appointed to consider the question of an international coinage reported that the adoption by the Latin Union and the United States of the British sovereign as monetary unit (as the international coin) provided the one practical basis. The European currencies had been deranged, we had long enjoyed a sound currency system: "Where the currency has become very much deranged it can hardly be said to be an inconvenience to establish a sound system: where frequent changes of the currency have occurred this inconvenience of a further change in order to establish a permanent or general system is less felt. The inconvenience is greatest where a sound system has long been in existence, and is deeply rooted in the feelings and habits of the people." Another obstacle to a uniform international coinage was raised when Germany in 1870 adopted a system of decimal coinage unrelated to the Latin System. Besides, even if a theoretical equivalence was established among the standard coins there would be in practice a divergence. For there would be varying degrees of adherence to the coinage laws and varying degrees of abrasion among the coins; even now the Mint Par is superseded by the Commercial Par. *The Committee on Commercial and Industrial Policy after the War* deprecated any change in our system. Decimalisation means the abandonment or modification of either the pound or the penny. The abandonment of the sovereign as the standard and working unit of international exchange is out of the question. And to preserve the credit of the penny at home is as important as to maintain that of the sovereign abroad.

The crux of the question for us is, however, the alteration of the value of the penny, and it is necessary to consider closely what this change means and what are the advantages it offers. It would do nothing towards unifying the

various subsidiary coinages of the British Empire, such as the Indian rupee and the Straits dollar, and it would bring us no nearer to Canada, Newfoundland, British Honduras and British Guiana which now use the United States dollar. It would not advance us a step towards the adoption of an international currency and it cannot, therefore, be said to have any really important bearing upon the promotion of foreign trade. It would still be necessary for this purpose, though perhaps slightly easier, to translate our prices into foreign currencies at the varying rates of exchange. The proposal in fact offers little more than a purely domestic convenience in the simplification of account keeping. This convenience would no doubt be considerable in the case of Banks and large commercial firms ; but it would offer no great attraction to the majority of smaller firms, while for the great mass of daily retail transactions it is doubtful whether our existing duodecimal system is not practically superior to a decimal system. At any rate, the former is firmly rooted in the minds of the people.

Apart from this consideration the change would involve the readjustment of the innumerable retail transactions which are based upon the penny. Prices which are now fixed in multiples of the penny would have no exact equivalent in the new coinage. In every case either the purchaser would have to get less for his pence or the scale of prices would have to be raised. More than £19,000,000 of Postal Revenue was collected in 1913-14 by charges based on units not exceeding 2d. A loss of 4 per cent. on this amount would be nearly £1,000,000. The finance of the National Insurance Act would have to be recast, since, while the monetary benefits are paid in shillings, the contributions are calculated in pence. The same necessity would apply to railway, tramway and omnibus fares. The

Some
Disadvantages
of Change.

fact that no exact equivalent for existing rates could be fixed in these cases would cause special difficulties.

As another illustration of the far-reaching effect of the coinage, it must be noted that all hourly and piece-work wages, would have to be revised. In the cotton trade, for example, wages rates rest on elaborate price lists expressed in pence or fractions of a penny. In each individual case the wage-earner must either lose or gain, and, although no doubt after elaborate negotiations a common measure would be found by give and take over the whole range of rates, the process would inevitably involve much friction and probably in some cases serious labour disputes. While powerful associations of workmen would be able to protect themselves, unorganised labour would probably stand to lose by the change. It is not improbable that the suspicion might arise among workmen that an indirect attack was being made upon their newly won rises of wages by means of the depreciation of the working man's coin.

Again to quote from Mr. Gladstone's speech in 1854: "An alteration of the value of coins which are in point of fact the measures of value and the basis of the whole idea of value of the masses of the people is a very serious matter and one which ought not to be undertaken on any mere abstract opinion and consideration without fully ascertaining that the ground under foot is secure."

We are to distinguish between coins in circulation and the reckoning of money of account.

Coins provide machinery for the adjustment of small payments. When we consider in this respect
 Coins in Circulation. the convenience of a coinage system the question to which we chiefly direct ourselves is: do these coins make easy the myriad transactions of

everyday life in which actual coins pass? The retailing of commodities forms a great part of such transactions; and the desirable property in a system of coinage is that it should provide coins capable of division, as far as possible, into parts without remainder in the same ways as the units of weights and measures are divided. Our system of weights (16 ounces to one pound, for instance; 12 inches to one foot) invites us to think in halves and quarters, and implies a demand for similar division of the money units. Our existing system is admirably adapted to the needs of everyday life. The shilling of 48 farthings is divisible without remainder by 2, 3, 4, 6, 8, 12, 16, 24; the half-florin of 50 mils would be divisible by 2, 5, 10, 25. And the convenience of the binary system is the greater in that we have what is largely a binary system of weights and measures.

A convenient money of account is one that makes easy the record of transactions and the calculations relating to them, and usually as with us, the standard coin is the unit of account. But, as we have seen, the unit of account is not of necessity represented by a coin; shilling was the Old English money of account but the coin in circulation was the silver penny. The existing system entails compound arithmetic; and perhaps a decimal system might save a little time in school. It is doubtful whether the saving would be great and in any event the compound arithmetic gives a useful mental exercise; and the vulgar fractions would need to be learned for other purposes. And the advantages of the decimal system in accounting could be obtained without tampering with our coinage. One of the members of the Commission explained a useful method:

- (a) To convert into pounds and decimals of £1 to three places of decimals, sums expressed in £ s. d.

The pounds remain unaltered, multiply the shillings by five and make two decimal places. Multiply the pence by four; if the product is less than 12, add 0; if between 12 and 36 inclusive, add 1; if more than 36 add 2. Make three decimal places. Add the whole and the sum is the answer.

- (b) To convert into £ s. d. sums expressed in pounds and decimals of £1 to three decimal places.

The pounds remain unaltered. Multiply the figure in the first decimal place by 2 and add 1 if the figure in the second decimal place is 5 or upwards. The result is a number of shillings. Form a number out of (1) the second decimal figure or what is left after subtracting 5 and (2) the third decimal figure. If the figure so formed is less than 12, add 0; if between 12 and 36 inclusive, subtract 1; if more than 36, subtract 2. Divide the result by 4. The quotient is the number of pence.

The application of these rules may be illustrated by a simple example:—

£	s.	d.	
7	0	0	£7·000
0	13	0	£·65
0	0	6	£·025
Decimalised form			£7·675

Table I. on next page shows the decimalised values of the $\frac{1}{4}$ d., $\frac{1}{2}$ d., 1d., 2d., etc., to 11d., and 1s., 2s., etc., to 19s.

It would tend to greater accuracy in the final results of a large number of arithmetical operations in which only three places of decimals are used if 3d. were always called ·013, which is ·0005 *more* than the true value, and 9d. were called ·037, which is ·0005 *less* than the true value.

If the operator examines the forms which these decimals

TABLE I.

Pence.	Proportion of £l.	The same expressed in Decimals exactly.	The same to Three Places of Decimals.	Shillings.	Proportion of £l.	The same expressed in Decimals.	Shillings.	Proportion of £l.	The same expressed in Decimals.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	$\frac{1}{240}$	.0010416	.001	1	$\frac{1}{240}$	.05	14	$\frac{7}{16}$	.7
2	$\frac{1}{120}$	.002083	.002	2	$\frac{1}{120}$	.1	15	$\frac{7}{8}$	.75
3	$\frac{1}{80}$	.00416	.004	3	$\frac{3}{240}$	.15	16	$\frac{4}{5}$	.8
4	$\frac{1}{60}$	.0083	.008	4	$\frac{1}{30}$	.2	17	$\frac{17}{20}$	.85
5	$\frac{1}{48}$	.0125	.013	5	$\frac{1}{24}$	.25	18	$\frac{9}{10}$	.9
6	$\frac{1}{40}$	.016	.017	6	$\frac{1}{20}$	.3	19	$\frac{19}{20}$	.95
7	$\frac{1}{36}$	.02083	.021	7	$\frac{7}{240}$	.35			
8	$\frac{1}{30}$	.025	.025	8	$\frac{2}{30}$	.4			
9	$\frac{1}{24}$	.02916	.029	9	$\frac{9}{240}$	.45			
10	$\frac{1}{20}$	.03	.033	10	$\frac{1}{20}$	.5			
11	$\frac{1}{18}$	.0375	.038	11	$\frac{11}{240}$	.55			
12	$\frac{1}{16}$	.0416	.042	12	$\frac{1}{8}$	.6			
13	$\frac{1}{12}$	.04583	.046	13	$\frac{13}{240}$	.65			

take, and compares them with one another, he will see that they lend themselves easily to memorising and to arithmetical manipulation. Conversion and re-conversion, and any calculation in which decimal processes are an advantage, present no more difficulty with this than any other system. Its disadvantage, as compared with a system of decimal currency which is exact to three places of decimals, is that in large calculations, especially if multiplication is involved, the decimalisation must be extended to four or more places of decimals if complete accuracy is required.

The gain from decimalising arises from the elimination of compound arithmetic in computations involving multiplication and division, especially if use be made of what are known as "contracted" methods, the rules for which are well known. Where extensive calculations have to be made, as in the Statistical Departments of large businesses, or in the Actuarial Department of an Assurance Company, resort is had to mechanical aids, such as the Arithmometer and slide rule, or to books of logarithms and other tables. None of these can be used to advantage unless the operator has facility in converting £ s. d. values into their decimal equivalents or vice versa. Given such facility, calculations can be made by mechanical means with great speed and accuracy.

That a decimal system has some advantages is undoubted. Such are the following :—

- (1) Our arithmetic system is based on ten, and it is clearly a convenience to be able to make our monetary calculations on the same ten basis (when we add 9 and 6, it is desirable that the result should appear as 15, not as 1s. 3d.). We should, however, note in passing that errors are incident in decimals themselves; and in particular some of us have difficulty with the decimal point.

Some
Advantages
of the Decimal
System.

(2) The decimal system is closely allied to percentages in which enormous numbers of calculations are now made.

(3) Greater ease in comparing prices and payments in foreign moneys.

(4) It would lead to the adoption of the metric system of weights and measures.

The competing methods of obtaining the advantages are embodied in the Bills of which Lord Southwark and Lord Leverhulme are the respective sponsors. The first seeks to enact that: "For the existing coinage of silver, copper and bronze, there shall be substituted a coinage based on a decimal system, that is to say, each coin shall be a thousandth part or the multiple of a thousandth part in value of a sovereign, and such part is hereinafter in this Act called a 'mil.'" The schedule of suggested coins is:—

SCHEDULE.

Denomination of Coin.	Value in Pounds.	Value in Mils.
Silver :	£	
Double florin	·200	200
Florin	·100	100
Half florin	·050	50
Quarter florin	·025	25
Nickel or other metal alloy :		
Ten mil piece	·010	10
Five mil piece... ..	·005	5
Bronze :		
Four mil piece	·004	4
Three mil piece	·003	3
Two mil piece	·002	2
Mil piece	·001	1

Lord Leverhulme's alternative abandons the sovereign as the unit. Though he would, in the interest of foreign trade, have it coined, it ceases to be the money of account. He creates a new unit of 100 half-pennies called a royal: "For the existing coinage of gold, silver, nickel and bronze, there shall be substituted a new coinage based on a decimal system; that is to say, each coin shall be of a value equal to that of one four hundred and eightieth part, or a multiple or a fraction of one four hundred and eightieth part, of a sovereign; such four hundred and eightieth part shall be and is in this Act denominated a half-penny, and one hundred half-pennies shall be and are in this Act denominated a 'royal.'"

Under this Act the coins suggested are:—

Denomination of Coins.	Value in Royals.	Value in Half-pennies.
Gold :		
Guinea	5·00	500
Pound Sterling or Sovereign	4·80	480
Half Guinea	2·50	250
Silver :		
Royal	1·00	100
Florin	·50	50
Shilling... ..	·25	25
Nickel :		
Tester	·10	10
Bit	·05	5
Bronze :		
Penny	·02	2
Half-penny	·01	1
Farthing	·005	$\frac{1}{2}$

The advantages claimed for this second scheme include:

- (1) Greater simplicity, so that the public would more easily understand it;
- (2) The retention unaltered of the penny, the standard of value in the transactions of the mass of the people;
- (3) Provision of an exact equivalent of present coins, except the farthing;
- (4) The provision, in the Royal of 4s. 2d., of a more useful, because smaller, unit than the pound;
- (5) The establishment of a bond between English-speaking nations—since the Royal and the Dollar (the basis of the currency system of the United States of America, Canada, Newfoundland, and British Honduras) are approximately equal;
- (6) The retention untouched of the bronze coins; which greatly outnumber the silver and gold coins;
- (7) The approximation provided to the coinage of numerically the larger part of the world.

The insuperable objection, in the eyes of the bankers, to this scheme is the abolition of the pound as the unit of value. This would endanger the position of London as the financial centre of the world: the sovereign is known and trusted throughout the conservative East, and it is the only coin having legal tender practically throughout the Empire. It is the material counterpart of the bond afforded by a common king and a common flag. The subsidiary currencies do not matter so long as the common standard of value in the sovereign is maintained.

The practical difficulty, arising from the additional labour thrown upon the Mint, is not to be disregarded. The Deputy Master of the Mint, one of the Commissioners, gives a careful estimate: "To replace by mil-value coins the whole of those which Lord Southwark's Bill

*The Minting
of the New
Coins.*

entirely discards, viz. the crown, half-crown, threepence, penny, half-penny, and farthing, might require the whole normal output of the Mint, at its present capacity, for some 13 years, nothing being left for ordinary increases of currency. If one half of the output were devoted to replacement, and the other to meeting ordinary demands, the period might be doubled. A further period of some six or seven years might be required, on the same supposition, for replacement of existing shillings and sixpences by half-florins and quarter-florins under the latter designation. On the other hand, the above calculation is based on existing capacity only, without taking account of extension or outside assistance, both of which may be regarded as possible, if necessary. Moreover, as regards the question of urgency, the pressure would be relieved by the suggested temporary retention not only of the half-crown, the value of which in currency requires at least two coins of a mil-series for replacement, but also of the existing bronze coins at nominal values expressed in mils. If this were arranged, the immediate special requirements, apart from any reintroduction of double florins, which have not been coined since 1890, and from normal increases, would apparently be restricted to the supply, firstly, of 10-mil pieces (between two or three hundred million) to take the place of the existing threepences, and, secondly, of such mil coins of smaller denominations as might be needed for purposes of change or otherwise to supplement the existing bronze coins according to the values (4 , $4\frac{1}{8}$ or 5 mils suggested in the case of the penny, and 2 , $2\frac{1}{2}$ or $2\frac{1}{2}$ in the case of the half-penny) that might be assigned to these. Such requirements could probably be met in a comparatively short time, although it would be difficult to estimate the period with any precision in the absence of a definite decision with regard to the existing bronze."

We may take it that for a generation the question of change will not come within the range of practical politics. The report, though by no means unanimous, is clear enough in the matter.

"In our opinion, therefore, it is not advisable to make any change in the denomination of the currency and money of account of the United Kingdom with a view to placing them on a decimal basis.

In support of this conclusion the following considerations appear to us to be sufficient:—

(1) In any other scheme for reducing the existing system to a decimal basis the pound should be retained.

(2) The pound and mil scheme is the only strongly supported scheme which complies with the condition.

(3) The advantage to be gained by a change to the pound and mil scheme as regards keeping accounts is in no way commensurate with the loss of the convenience of the existing system for other purposes.

(4) Grave difficulties will be created by any alteration of the penny.

(5) The scheme cannot be tried as an experiment or on a voluntary basis."

CHAPTER VII.

EXCHANGE STANDARD CURRENCIES.

Money is a commodity, or the representation of a commodity. And the commodity for the great mass of the commercial world is gold; with the important exception of China and the unimportant exception of Guatemala the world is under a gold currency. We may say without substantial inaccuracy that money is gold or a right to call for gold. And the Coinage Laws of the world enact what amount of gold shall be regarded as a unit of value. We obtain, therefore, from the Coinage Laws of the countries considered a means of comparing currencies. For we have merely to take the weights prescribed for the standard gold coin and place those weights in relation to one another. Unluckily this gives us no very sound basis for practical purposes; since the actual coin in circulation diverges much or little from the standard enacted in the law. The coins may be in general less than their decreed weight. Constant usage may have rubbed away—abraded—some of the metal; or irregular practices like the sweating of coins may have enabled rogues to make an illicit gain. Formerly, too, governments were not ashamed themselves to defraud their subjects by adding a too great proportion of alloy. Such debasement of coinage is not to be found now; the problem of light coinage is in many countries a very real one.

With us the discrepancy from the legal limits is slight; the precautions taken against deterioration are singularly effective. Other peoples are less fortunate. The Coinage Laws give us a theoretical Mint Par; the practical Par usually differs. We note, too, that when a community has departed from the effective gold standard of its Coinage Laws no ready method of comparison is available. We must then consider such elusive ideas as Index Numbers and Purchasing Power.

Consider the Mint Par of the typical currencies, our own, that of the United States, that of France, Mint Par. and that of Germany—the sovereign, the dollar, the franc, and the mark currency. And let us imagine that the gold standard adopted in these currencies is effective. *Weights* are specified in each currency; the sovereign must contain a definite weight of fine gold, the dollar a definite weight of fine gold, and so on. What we call the “Mint Price of Gold” is simply an awkward and roundabout way of defining the weight of a sovereign. £3 17s. 10½d. is what one ounce of standard gold ($\frac{1}{12}$ fine, that is) becomes when turned into coins at the Mint; or, to take the old rule, 20 pounds troy weight of gold is turned into 934 sovereigns and one half-sovereign. We can, therefore, calculate the number of grains in a sovereign (1 ounce divided by $3\frac{1}{16}$), i.e. 123·25 grains, of which 112·98 grains are fine gold. It is the last number that matters. The United States method of fixing weight is more direct: the gold dollar must contain 23·22 grains of fine gold. For every 23·22 grains of fine gold taken to the Assay Offices a dollar must be credited. The five-dollar piece (the half-eagle) contains, therefore, 116·10 grains of fine gold, about 3 per cent. more than the sovereign. A simple calculation, a mere deduction from the Coinage Laws, gives the Mint Par between

sovereign and dollar: it is as 112·98 is to 23·22, or as 4·866 is to 1. The theoretical equivalence, the Mint Par, is, you note, fixed. Till one or other country alters its Coinage Law, 4·866 dollars is the Mint Par of one sovereign. Though the exchanges are now above, now below this figure, 4·866 dollars in New York contain the same amount of gold as one sovereign in London does.

We look at the French coinage laws (and doing so we are able to come to conclusions regarding other countries in the Latin Union, or possessed of a currency on the same basis as that of the Latin Union). We find that a kilogram of fine gold is turned into 3447·74 francs. We turn to our own currency regulations and find that our sovereign weighs 7·98805 grams, of which $\frac{1}{2}$ are fine gold. A kilogram of fine gold becomes, therefore, 136·567 sovereigns. The result of our calculation gives us the Mint Par between the franc and the sovereign **25·225 to 1**. It does not matter that the gold franc is not a real coin. The unit of exchange value is still the twentieth part of a gold napoleon of twenty francs.

Similarly, we note that the German coinage law enacts that a kilogram of fine gold shall be coined into 2,790 marks; and the Mint Par between the mark and the sovereign is, therefore, **20·43**.

There is no Mint Par between a currency based on gold and one like that of China based on silver.

Gold and Silver. In order to obtain a comparison we treat one of the metals as a commodity valued (in terms of the market price) in the other. The Chinese monetary unit, for instance, is the tael. This is a definite *weight* of silver,—580 grains. If, therefore, the market price of silver goes up, our sovereign is worth fewer taels; if the market price of silver goes down, our sovereign is worth more taels. During the extended period when silver

was at a high price, missionaries and officials in China were in sorry straits: the sovereign in which payments to them were calculated went but a little way in exchange for silver.

There is in China no national silver coin. Silver passes by weight. Ingots of pure silver bearing a banker's or an assayer's seal and used for payments by weight are called *sycee*, a name meaning fine silk (capable, therefore, like the silver of being drawn out fine). The Mexican silver dollar is, among foreign silver coins, the one most used. This, too, passes by weight rather than by tale: it is quoted at so much the ounce.

India is in a curious *staté*. Its effective currency is the silver rupee; but an attempt is made to keep this (by "starving the currency") in stable relation to gold at $\frac{1}{16}$ of the pound sterling. The coinage of silver has been suspended; though, as in the countries of the Latin Union, silver is still full legal tender. The Government is bound to give silver rupees for gold at the fixed rate, but not gold for silver. There is a "gold standard without gold." It is a silver currency based on London gold. We have thus an instance of the awkward compromise known as the limping standard (*étalon boiteux*)—unlimited legal tender with suspension of coinage (again as in the countries of the Latin Union).

The sovereign is the monetary unit of Australia, New Zealand, and South Africa. The sovereign is stabilised in Egypt as equivalent to $97\frac{1}{2}$ piastres.

Notes on the
Table.

As illustrating the ease with which even backward races become accustomed to the using of paper substitutes for money, we may note the manner in which during the War paper rupee notes became current in India. There was a famine for silver currency; and the Indian Government

The par rates that chiefly enter into commercial relations may be noted from the table below:—

Country.	Unit of Currency.	Par of Exchange.		Gold Coins.	Silver Coins.
		s.d.	Number to £1		
<i>Dollar Currencies.</i>					
U.S.A.	Dollar of 100 cents	4/1.32	4.866	20, 10, 5, 2½, 1 dollar	1, ½, ¼ dollars; dime (10 cents)
Canada	" "	"	"	10, 5 dollars; £1, 10/-	1 dollar; ½, ¼, ⅛, 1/16, 1/20 dollar
<i>Latin Union Currencies.</i>					
France	Franco of 100 centims	-/9.51	25.225	20, 10 francs	5, 2, 1 francs; 50, 20 cents
Belgium	" "	"	"	20 francs	5, 2, 1 francs
Switzerland	" "	"	"	20, 10 francs	5, 2, 1 francs; 50 centimes
Italy	Lira of 100 centimes	"	"	100, 50, 20, 10, 5 lira	5, 2, 1 lire; 50 centesimi
Greece	Drachma of 100 lepta	"	"	20, 10, 5 drachma	5, 2, 1 drachma; 50, 20 lepta
Spain	Peseta of 100 centms	"	"	100, 50, 20, 10, 5 pesetas	5, 2, 1 pesetas; 50, 20 cent
Jugo-Slavia	Dinar of 100 paras	"	"	20, 10 dinars	5, 2, 1 dinars; 50 paras
Roumania	Lei of 100 bani	"	"	100, 50, 25, 20, 12½, 10 lei	5, 2, 1 lei; 50 bani
Finland	Finnish Mark of 100 penni (Markka)	"	"	20, 10 markkas	2, 1 markka; 50, 25 pennia

Country.	Unit of Currency.	Par of Exchange.		Gold Coins.	Silver Coins.
		s.d.	Number to £1		
Bulgaria	Lev of 100 slotinski	-/9.51	25.225	100, 20, 10 leva	5, 2, 1 leva; 50 slotinski
In addition we have Algeria, Madagascar, and Tunis with the French currency; and Tripoli with the Italian					
<i>Mark Currencies.</i>					
Germany	Mark of 100 pfennige	-/11.748	20.43	20, 10 mark	5, 3, 2, 1 mark; 50 pfennige
Poland	Polish Mark of 100 pfennige	"	"	20, 10 mark	5, 3, 2, 1 mark; 50 pfennige
<i>Other European Currencies.</i>					
Austria	Krone of 100 heller	-/10	24	100, 20, 10 kronen	5, 2, 1 kronen
Hungary	" "	"	"	" " "	5, 2, 1 kronen
Czecho-Slovakia	" "	"	"	" " "	5, 2, 1 kronen
Denmark	Krone of 100 ore	1/1½	17.78	20, 10 kronen	2, 1 kronen; 25, 10 ore
Norway	" "	1/1½	17.78	20, 10, 5 kroner	2, 1 kronen; 50, 25, 10 ore
Netherlands	Guilder of 100 cents	1/7.824	12.11	10, 5 guilder	2½, 1, ½ gu.; 25, 10 cents
Sweden	Krone of 100 ore	1/7.824	17.78	20, 10, 5 kroner	2, 1 kronen; 50, 25, 10 ore
Turkey	Lira of 100 piastres	18/-	111.19	500, 250, 100, 50, 25 piastres	20, 10, 5, 2, 1½ piastres
Russia	Rouble of 100 kopecks	2/1½	9.47	15, 10, 7½, 5 roubles	1 rouble; 50, 25, 20, 15, 5 kopecks
(The present currency has, you note, no real connection with these pre-revolutionary figures)					

Country.	Unit of Currency.	Par of Exchange.		Gold Coins.	Silver Coins.
		s.d.	Number to £1		
Portugal	Escudo or Milreis	4/5½	4·51	1, ½, ¼, ⅓ escudo	1 milreis
<i>Other American Currencies.</i>					
Mexico	Gold Peso (Dollar) of 100 Centaves	2/0½	9·80	10, 5 peso	1 dollar ; 50, 20, 10 centaves
It is curious to note though Mexico is now in line with the rest of the commercial world and on a gold basis, the Mexican silver dollar—which, as befitting a silver mining country, could be relied upon for its purity—circulates through China and the Far East.					
Argentina	Paper Peso (Dollar) on Gold basis				
Colombia					
Paraguay					
Chili	Gold peso (Dollar) of 100 Centaves	1/6	13½	20, 10, 5 peso	1 peso ; 20, 10, 5 centaves
Peru	Libra (Pound containing the same weight of fine gold as the sovereign but divided decimally)	20/-	1	1, ½, 1/5 libra	1, ½, ⅓ sols (tenths of 1)
Brazil	Milreis (1000 reis)	2/3	8½	20, 10 milreis	2, 1 milreis ; 300 reis

Country.	Unit of Currency.	Par of Exchange. <i>s.d.</i> Number to £1	Gold Coins.	Silver Coins.
<i>Other Asiatic Currencies.</i> Japan India	Yen of 100 Sen Rupee of 16 Annas or 64 Pice	2/0½ 9·80 2/0 10	20, 10, 5 yen £1, 10/-; and 15 rupees	50, 20, 10 sen ½, ¼, ⅓ rupee (nickel)
China	(Established at Silver basis so that terms of gold.	present at 1/10 of the pound sterling) there is no fixed par: parity fluctuates (See page 96)		with the price of silver in

decided to issue the paper money. It was feared that the Hindoos would refuse to take it in payment; and there was, in fact, some reluctance and hesitation at first. The fact that the rupee note was taken without question at the post offices and in payment of taxes speedily removed all hesitation and reluctance; and the Indian Empire like ourselves experienced the blessings and drawbacks of currency that was largely paper.

In many instances the system given is not achieved in practice: in most of the countries noted, there is no effective gold currency, and the great problem is to maintain the monetary system on the gold basis without the actual circulation of gold.

The following quotations, abstracted from *The Financial Times* of the 6th January, 1922, will serve to show among other things how far most of the world's currencies had in effect departed from the gold standard.

Appended is a list of Continental and other exchange rates on London:—

	Method of quoting.	Par of Exchange.	Quotations.	
			4th. Jan.	5th. Jan.
Paris, cheques ...	Fr. to £ ...	25.22 $\frac{1}{2}$	52.30.52.35	52.62.52.65
Berlin	Mks. to £ ...	20.43	807.812	830.834
Brussels, cheques	Fr. to £	25.22 $\frac{1}{2}$	54.95.55.00	55.05.55.15
Amsterdam, „	Fl. to £	12.107	11.43 $\frac{1}{2}$.44 $\frac{1}{2}$	11.42.11.43
Italy, sight	Lire to £ ...	25.22 $\frac{1}{2}$	97 $\frac{3}{4}$.98	97 $\frac{3}{4}$.98 $\frac{1}{2}$
Greece	Droh. to £...	25.22 $\frac{1}{2}$	97 $\frac{3}{4}$.98 $\frac{1}{2}$	96.97
Madrid, sight..	Pes. to £ ...	25.22 $\frac{1}{2}$	28.16.28.18	28.18.28.20
Lisbon, „	Escudo	53 $\frac{1}{2}$ d.	4 $\frac{3}{8}$ d.4 $\frac{5}{8}$ d.	4 $\frac{1}{2}$ d.4 $\frac{1}{2}$ d.
Switzerland, „	Fr. to £	25.22 $\frac{1}{2}$	21.67.21.70	21.65.21.68
Christiania, „	Kr. to £	18.159	26.85.26.90	27.08.27.12
Stockholm, „	Kr. to £	18.159	16.88.16.91	16.97.17.00
Copenhagen, „	Kr. to £	18.159	21.03.21.08	21.05.21.10
Helsingfors	Mks. to £ ...	25.22 $\frac{1}{2}$	220.224	225.228
Bucharest	Lei to £ ...	25.22	—	500.550
Prague	Kr. to £ ...	24.02	265.268	262.267
Warsaw	Mks. to £ ...	20.43	12,000.13,000	11,750.12,750
Vienna	Kr. to £ ...	24.02	11,000.11,500	11,500.12,500
Budapest	Kr. to £ ...	24.02	2,3000.2,600	2,300.2,600
Belgrade	Din. to £ ...	25.22 $\frac{1}{2}$	275.285	283.293
Sofia	Leva to £ ...	25.22 $\frac{1}{2}$	590.610	590.610
Constantinople ..	Pstrs. to £..	110	665.695	665.695
Alexandria, sight	Pstrs. to £..	97 $\frac{1}{2}$	97 $\frac{3}{8}$.97 $\frac{5}{8}$	97 $\frac{3}{8}$.97 $\frac{5}{8}$
Bombay, T.T.	Rupce	2s. 0d.	15 $\frac{3}{4}$ d.16 $\frac{1}{2}$ d.	15 $\frac{3}{4}$ d.16 $\frac{1}{2}$ d.
Calcutta, „	Rupce	2s. 0d.	15 $\frac{3}{4}$ d.16 $\frac{1}{2}$ d.	15 $\frac{3}{4}$ d.16 $\frac{1}{2}$ d.
Hong Kong, „	Dollar	—	31 $\frac{1}{2}$ d.32d.	31 $\frac{1}{2}$ d.32 $\frac{1}{2}$ d.
Shanghai, „	Tael	—	41d.42 $\frac{1}{2}$ d.	41d.42 $\frac{1}{2}$ d.
Singapore, „	Dollar	—	27 $\frac{1}{8}$ d.27 $\frac{1}{2}$ d.	27 $\frac{1}{8}$ d.
Yokohama, „	Yen	24.58d.	27.27d.	27 $\frac{1}{2}$ d.27 $\frac{1}{2}$ d.
New York, cable	Dol. to £ ...	4.86	4.20 $\frac{1}{2}$.4.20 $\frac{3}{4}$	4.18 $\frac{3}{4}$.4.19 $\frac{1}{2}$
Montreal, cable..	Dol. to £ ...	4.86	4.40 $\frac{1}{2}$.4.41 $\frac{1}{2}$	4.39 $\frac{1}{2}$.4.40 $\frac{1}{2}$
Rio de J., 90 d'ys	Milreis	16d.	7 $\frac{1}{2}$ d.	7 $\frac{1}{2}$ d.
Rio de J., T.T.	Milreis	16d.	7 $\frac{1}{2}$ d.7 $\frac{1}{2}$ d.	7 $\frac{1}{2}$ d.7 $\frac{1}{2}$ d.
Buenos A's 90dys	Dollar	47.58d.	44 $\frac{1}{2}$ d.	44 $\frac{1}{2}$ d.
Buenos A's T.T.	Dollar	47.58d.	43 $\frac{1}{8}$.4 $\frac{5}{8}$ d.	43d.43 $\frac{1}{2}$ d.
Valparaiso, 90 dys	Dol. to £ ...	13.33	40.30	40.20
Montevideo, T.T.	Dollar	51d.	41d.41 $\frac{1}{2}$ d.	40 $\frac{1}{2}$ d.41d.
Lima	£ to £P	par	16% prem.	16% prem.
Manila	Dollar	24.066d.	2s. 2 $\frac{1}{2}$ d.	2s. 2 $\frac{1}{2}$ d.
Mexico	Dollar	24.58d.	32 $\frac{1}{4}$ d.33 $\frac{1}{4}$ d.	32 $\frac{1}{2}$ d.33 $\frac{1}{2}$ d.

Nominal. Premium on gold at Lisbon 1,100 per cent.

CHAPTER VIII.

THE VALUE OF MONEY: METHOD OF MEASURING VARIATIONS.

Before we consider the causes affecting the value of money, we had better define our terms. To the economist the *value of money* is what money will exchange for, the purchasing power of money: the value of money is high when it will buy much of other things (*i.e.* when prices are low); the value of money is low when it will buy little of other things (*i.e.* when prices are high). To put the matter formally; the value of money varies inversely as general prices, falling as these rise, rising as these fall. In the language of the money market the value of money has, however, another sense; it is the price paid for the transfer of the control of capital, in other words, it is the interest on money. Some have capital available for investment on loan; others seek capital for productive or unproductive consumption. The latter are very willing to pay for this control of capital. The rate of interest paid for the transfer is commonly called the value of money: money is "dear" (its value is high) when much must be paid in order to have control over it: money is cheap (its value is low) when little need be paid to obtain control over it.

There is no connection between the two senses: prices may be low (value in the economic sense, or purchasing power of money, is high) while rate of interest is high (value in the mercantile sense, interest on loans, is also high). This was so in the tenth century as compared with the twentieth. Interest was high (money was dear to borrow) and prices were low (money was dear to buy). With us in this first half of 1922 interest is low (money is cheap to borrow) and prices are high (money is cheap to buy). Moreover, when we realise clearly that interest on money is reckoned as so much per cent., it is clear that interest is independent of general prices. If yield on an investment in Consols is 5 per cent. this year and was also 5 per cent. in 1913, the rate of interest (value in the mercantile sense) is exactly the same though purchasing power (value in the economic sense) has been halved. The £100 of the loan buys less of things in general than the £100 in 1913; but then, so does the £5 of interest in 1922 compared with the £5 in 1913.

To the economist "value of money" is simply an instance of the general theory of value. All "goods" possess properties that enable them to satisfy a human desire, and these properties are independent of other goods, are, if you like, intrinsic in the goods themselves. Bread in itself possesses the property of ability to satisfy hunger; a pair of kid gloves possesses the property of ability to provide an attractive covering for the hands; the light of the sun possesses the property of ability to afford a genial and exhilarating warmth. All three are goods. Value arises, however, when we *compare* goods. Some "goods" are available for us in less quantity than we wish: they can be obtained only by labour and sacrifice, only by giving up a portion of our time and energy. They are not

Meaning of
"Value of
Money."

free goods. But they satisfy a more or less intense desire; and the strength of this desire helps to decide what we are prepared to exchange for them. It helps, that is, to decide their value—which is their *relation* towards other “goods.” Value is an accidental, not an essential property of things; it arises simply because there is not enough to go round. If, by some revolution of human affairs, good wheat bread became as plentiful as the air of heaven, bread would cease to have value: it would lose this accidental property due to relative scarcity. Value always implies a comparison. It is a relation between a commodity and what must be given up for that commodity. The “value of gold” is its purchasing power. That value is high when an ounce of gold exchanges for a great amount of the necessities and comforts of existence; that value is low when the ounce exchanges for a small amount.

We come here to the fundamental problem in relation to money. The question is: upon what does the value of money depend? What causes make that value rise? What causes make it fall? We have here, you note, a combination of a hotly debated practical question and a question into which mere speculative curiosity probes. We have spoken of a *standard of value*. This ideal standard is, however, one that does not vary with time or place. If now we are asked whether gold and silver make such a standard we shall be obliged to say no. We are certainly justified in saying that the precious metals are *relatively* stable: they do not vary in value as widely and capriciously as strawberries in summer do. Still there have been variations in that value. On occasions, indeed, the variations have been startling and upsetting. We are told, for instance, that the discovery in 1546 of the mines of Potosi whence silver could be obtained with surprising

The Quantity
Theory of
Money.

ease, increased the yearly supply of new silver to Europe from about £150,000 to £2,100,000—fourteen times as much. The result was an embarrassing rise of prices. During the latter part of Elizabeth's reign the money granted by Parliament failed to pay the household expenses of the queen. What would have amply satisfied her father, Henry the Eighth, though he had expensive tastes, seemed to go but a little way; and Elizabeth was constrained to make use of the hospitality of her nobles. When James came to the throne this device was not available for him: the nobles did not want him, and he had a family dependent. His reign was accordingly filled with dissensions between him and his Parliaments; they charged him with secret extravagances, he grumbled about their niggardliness. The confusion wrought in men's minds by changes in the value of money caused most of the trouble.

Value, we say, is an expression of the comparison of one thing with others; it is an arrangement in an order of precedence. When we arrange things in order of value we state the order in which we should choose them; a pound of silver is more valuable than a pound of iron, not because men can make more use of it, but because, the state of things being as it is, men prefer it. The value is usually ascertainable from the price; if a cow costs £20 and a sheep £2, then we are justified in saying that a cow is ten times as valuable as a sheep. *Wealth*, to the economist, consists of all that man wants, yet that cannot be obtained without effort; it implies, that is, two properties: (1) power to satisfy desire, but also (2) difficulty of attainment. What people want, being limited, is wealth; but in that wealth some part satisfies more imperious desires, some part needs more strenuous efforts to attain. Value is a product of these two factors.

Value expresses the preferences of men ; and if, as we do, we measure those preferences by the amount of money men are prepared to pay to gratify them, we may say that value expresses the relative *prices* of things. Price is the value of a thing in terms of money. Money provides the standard of comparison by which to arrange goods in their order, to value them. *We lay stress upon value when we think of Exchange* (as we lay stress upon utility when we think of Consumption ; upon labour when we think of Production ; and upon the taking possession, or appropriation, of a thing when we think of Distribution).

Ordinary observation, however, and a reference to price lists of varying times tell us that prices—values expressed in money, are not invariable, and that at particular times they change rapidly. We have during recent years experienced so startling changes in prices—both prices in general and prices in relation to one another—that all men nowadays take an interest in Index numbers denoting such changes. Prices change in relation to one another : there is apparent, for example, a constant tendency for a bushel of wheat to exchange for a greater and greater length of calico. Prices also change in general : that is, a given weight of gold will purchase now more, now less, of commodities in general. The causes of the changes in relative prices are infinite : an ingenious device, cheapening production greatly, will diminish the value of a commodity in relation to others unaffected by the improvement ; the discovery of a new use to which a commodity may be applied, so that the desire of men for the commodity becomes more intense, will increase the value. The cause of a general change in prices is more of an abstraction. The term “commodities in general” needs some effort of mind to grasp. It is to make this abstraction concrete that the economist brings forward his index number.

The problem is you see: how may we estimate the changes in general prices (or, looked at from another point of view, in the command that money has over commodities,—in the purchasing power of money)? The method of *Index Numbers* is that usually employed. Such numbers seek to make more concrete the abstraction “General level of prices.” From our very definition itself of *value*, that of money is reflected in the prices of all other commodities. “A general rise in prices” is another way of saying “a fall in the value of money”; a general fall in prices is tantamount to a rise in the value of money. Those having a right to money are affected for the worse by a fall in the value of money, for the better by a rise.

In order to replace the irregularity of an individual price by the regularity of prices in general, dealers in statistics proceed as follows: A number of the most important commodities are selected; their prices month by month, or year by year, are ascertained as precisely as is practicable; a particular year is chosen as the basis of comparison, prices for that year are reduced to 100, prices for other years may then be exhibited as a percentage of those for the basic year. Take three prices only for illustration: in 1913 a 4lb. loaf cost 6d., in 1921 it cost 11d.; in 1913 a journey from London to Liverpool cost 15s., in 1921 it cost 35s.; in 1913 a quart of milk cost 4d., in 1921 it cost 9d. Now, 11d. is 183 per cent. of 6d.; 35s. is 233 per cent. of 15s.; 9d. is 225 per cent. of 4d. The average per centage is thus 214; and this would serve as a very rough Index Number for 1921. In practice, you will readily suppose, a far greater number of commodities is taken, and special care is given that the price records are reliable. See, for instance, *The Times Index* below. The *higher* the Index Number the *lower* is the value of the

money; the lower the Index Number the higher the value of the money. The larger the number of commodities taken the more accurate will the Index Number be; and if some attention is paid to the relative importance of the commodities selected—if, for instance, a variation in the price of bread is regarded as three times as important as a variation in the price of milk—there is a nearer approach to the real state of affairs. I should, for instance, give a distorted view of the real change if I attached as much importance to a change in the price of rice as I do to a change in the price of wheat. The fluctuation in the price of beer is a matter of no concern to a teetotaler; it may be very material to another man. Recent investigations have, therefore, been inclined to give to each commodity a coefficient corresponding to the business done in that commodity. There seems, however, to be little gained by the added complication. Provided that some wisdom is shown in the selection of the articles for comparison, the "weighted average" does not differ materially from the simple average: either gives a result accurate enough for practical purposes. Prices have a remarkable tendency to move in sympathy with one another. Nor is this strange. For all are influenced by transport improvements, by improvements in methods of production, by all we call progress; and by the feelings of the business world.

A method, seeking to be more scientific than this arbitrary method, is that of taking as the
Standard of Comfort. basis of comparison the expenditure of a family in a definite station of life, to estimate what the food (bread, meat, groceries, and so on), clothing, lodging, heating, would cost at varying periods: the resulting figures, representing the cost at different epochs of an identical mode of life (standard of living) give information on the movement of general prices. You will

admit, however, that one can hardly be certain that he is really selecting identical modes of life. Nor can he place implicit reliance on the figure he receives: which of us can tell with much certainty how we spent our income last year?

You will have anticipated the statement that in regard to the construction of Index Numbers there is a great diversity of opinions. Almost every self-respecting economist feels constrained to adopt a new method, or to criticise at length existing methods. Once only papers like the *Economist* and the *Statist* had their system. Of late *The Times* itself has its system. All commercial communities have this means of estimating the course of general prices; Japan and Sweden and Italy have more or less happy solutions of the problem.

All the sets, however, are based on the one big principle: they seek to set aside the irregularity of the individual instance and replace it by the regularity of the big number. The particular is eliminated and replaced by the general.

The Index Number, that is, is a kind of average. We may well leave to the mathematicians the interminable discussions of the relative merits of the various methods of obtaining that average. Here we shall be content to describe some of the best known methods, and to point out some of the difficulties that arise.

The practical question underlying the effort to measure changes in value is this: how far is our money a good standard for deferred payments? In order that there may be certainty in contracts, I should be tolerably confident that I shall get what I bargain for, that I shall be constrained to pay no more than I covenanted for. If in 1900 I begin to pay a yearly premium to an Insurance Company on the understanding that in 1922 I should receive £100, I am

Principle
of Index
Numbers.

The Point
at Issue.

naturally aggrieved when the £100 in 1922 "goes only half as far"—obtains for me only half of the necessities and comforts of existence—as it would have done in 1900. The letter of the contract has been performed; I have obtained a right to call for a specified weight of gold. The spirit, however, is wanting: this specified weight of gold will not do the work I expected it to do. Is it possible, in order to avoid unfairness on one side or the other, in order neither to defraud the creditor nor unduly burden the debtor, to stabilise money? Can we make its purchasing power constant?

Some economists—American chiefly—say that it is practicable as well as possible to arrange that the amounts paid to satisfy claims need not vary. They would have contracts made, not in terms of gold, but in such weights of gold as should have a fixed purchasing power. If the value of gold went up they would take from the weight of a dollar; if the value of gold went down, so that an ounce could purchase less of commodities in general, they would add to the weight. The dollar would, therefore, always buy the same amount of composite commodity—made up of lengths of cloth, weights of food, measures of oil and wine. The material dollar itself would vary, not its immaterial purchasing power: there would, say the advocates of this scheme, be a par not with a fixed weight of gold but with such as should have a fixed purchasing power. The Money Market would be machinery by which one could buy and sell future *Board of Trade* or *Statist* or *Times* or other Index Numbers. We can but faintly imagine how the disputes over the various systems would be intensified.¹

¹ The problem in regard to value is not, we should note, the same as the problem in regard to properties like length and weight. These latter are physical properties, and at a very early date certainty in the units of measurement was assured. The great

ceremony at St. Bartholomew's fair was the procession of the Merchant Taylors of London. Having dined and drunk well, they carried their silver yard-stick in stately pomp so that the yard-sticks of the country clothiers might be tested. The meticulous care taken to assure certainty is illustrated by a similar ceremony. Thus we read in the *Times* of August 4th, 1922:

"THE STANDARD YARD AND POUND.

HOUSE OF COMMONS COPIES RE-INTERRED.

In the presence of the Speaker, various officials of Government Departments and members of Parliament, the copies of the Imperial Standards of the British Yard and the British Pound were re-immured in the wall on the public staircase leading to the Committee Rooms of the House of Commons yesterday, after removal for verification.

Report was made that comparisons with the Imperial Standards showed that these copies had slight variations. The yard measure was one-ten thousandth of an inch shorter than the Imperial Standard, while the pound weight was 0·00286 grain heavier than the Standard.

The copies were displayed on a table in the lower waiting hall of the House, and were inspected with great interest. The measure consists of a bar of bronze with the exact yard marked upon it; while the pound weight "copy" is made of platinum.

Mr. Percy Ashley, Assistant Secretary to the Board of Trade, stated that the old Imperial Standards having been lost in the fire which destroyed the Houses of Parliament in 1834, new Standards were constructed in 1844 (for the pound) and 1845 (for the yard); at the same time four sets of copies were ordered by Parliament to be made, of which two were to be deposited at the Royal Mint and the Royal Observatory, one was to be entrusted to the care of the Royal Society, and the fourth was to be immured at the Houses of Parliament.

After inspection the copies were replaced in their original boxes, which were hermetically sealed in a lead sheathing and placed in an outer box, which was then re-interred in the staircase wall, together with an account of the proceedings signed by the Speaker and others present."

The value of a thing may alter, however, not from what

It will probably be long before such a scheme comes within the region of practical politics. Nor is there much need to complain about violence of fluctuations in the purchasing power of money. The war years were altogether exceptional; and arguments from them can hardly be applied indiscriminately. So long as gold remains the effective standard of currency, the business man has little need to fear that his calculations will be upset by abrupt changes either in the demand or the supply of gold. The ideal is perhaps an invariable standard for deferred payments; but we should be ill-advised to give up our very definite measure—a weight of a particular metal—in exchange for an airy abstraction. Moreover, the business man is normally both debtor and creditor, he has much to pay as well as much to receive. What he loses on the swings he gains on the roundabouts; if the value of gold rises, he loses as debtor but gains as creditor, and the balance of loss and gain will probably be small.

The *Economist's* Index Number, perhaps most quoted among us, is a comparison of wholesale prices. These are

happens to the thing itself, but from what has happened to the things taken for comparison. We must have a unit for the measurement of debt. It seems to have been assumed that by making this unit an invariable weight of an invariable substance—or of a *right* to it—we could assure ourselves of its stability. That is not so, however. Certainly, so long as the Coinage Laws are obeyed, the sovereign as a substance cannot alter. The law cannot, though, settle what the value, the purchasing power, of the sovereign shall be. It cannot in ordinary times decree how many loaves or yards of calico it shall buy. And this is what matters. The trader is not seeking many monetary units; he is seeking many commodities in exchange for what he sells. The worker, whose services create a debt due from the employer, is anxious not that this debt shall be big numerically, but that it shall enable him to obtain much food and clothing, many of the amenities of civilised life.

comparatively easy to obtain; so many factors come into retail prices that we can hardly be certain that we are comparing the same things. We look, for example, at the bewildering variety of prices on the cuts in the butcher's window; and wonder what particular price we shall put down for "butcher's meat." The Ministry of Labour tries to compare the prices to the ultimate consumer, and gets hundreds of quotations from different parts of the country. The severe criticism to which the results obtained are subjected shows how little satisfaction is given by the elaborate tabling. The *Economist* takes as its point of departure the simple average of prices in the period 1901-5. Five groups of commodities are formed and a number roughly correspondent to the economic importance of the commodities is assigned to each group. The groups and numbers are—

Cereals and Meat.	Other Food Products (Tea, Sugar, etc.).	Textiles.	Minerals.	Miscellaneous (Timber, Rubber, Oils, etc.).	Total Percentage.
500	300	500	400	500	2200

Compare with these the numbers for December, 1921; and we have the requisite data for estimating the change in the purchasing power of gold.

The later numbers are—

Cereals and Meat.	Other Food Products (Tea, Sugar, etc.).	Textiles.	Minerals.	Miscellaneous (Timber, Rubber, Oils, etc.).	Total Percentage.
921½	636	1106	762	931½	4357

On the whole, that is, prices at the opening of 1922 were about double of what they were at the opening of 1906;

the rise was not uniform, however, being highest (121·10) in the textiles group, and the lowest (84·10) in the cereals-and-meat group. Full tables are given below.

The arithmetical average has been criticised as crude and misleading. It is asserted that an exceptionally great change in a single commodity influences the result too greatly. The geometric mean has, therefore, been at times used; at other times the harmonic; at others the median. We obtain arithmetical average when we simply add the numbers and divide by the number of examples we take: if on five successive days American "middling" cotton were quoted 5d., 6d., 8d., 9d., 11d., then the arithmetical average would be $39d. \div 5$ or 7·8d. We obtain the geometric average by multiplying the numbers in the series, and then taking of the product the root indicated by the number of terms in the series: in our example above, the geometric average would be $\sqrt[5]{(5 \times 6 \times 8 \times 9 \times 11)}$ or 7·5d. (logarithms make the ascertaining quite easy). We obtain the harmonic average when we find the reciprocal of the simple average of the series: in the example this is $1 \div \frac{\frac{1}{5} + \frac{1}{6} + \frac{1}{8} + \frac{1}{9} + \frac{1}{11}}{5}$ or 7·1. The median is the term

that has as many terms above it as below, in this instance 8.

During the years succeeding the Great War (1914 to 1918) *Index Numbers*, making concrete the abstract idea of purchasing power of money, obtained a new importance. Traders could not estimate payment by reference to weights of gold; for the currencies had only a nominal connection with gold. In the foreign exchanges a comparison between a "pound" and a "franc" was obtained by considering the relation between the *goods* a pound could buy in London and the *goods* a franc could

Recent
Importance
of Index
Numbers.

buy in Paris. The settlement of international transactions, formerly liquidated by the transfer of a tangible thing, *a weight of fine gold*, was now performed by the transfer of *purchasing power*, attested by paper purporting to be so many pounds or so many francs. Thus, we have the following suggestive table, showing the close relation between Index Numbers and the Foreign Exchanges.

January 1921.

"Statist" Index Numbers taking 1913 as the basis (i.e. prices in the United Kingdom had risen from 100 to 232)	232
France (<i>Statistique Generale</i>) taking 1913 as the basis	406

That is, a franc could purchase in 1921 only $\frac{100}{406}$ of what it could purchase in 1913.

That is, a pound could purchase in 1921 only $\frac{100}{232}$ of what it could purchase in 1913.

Thus starting with the Mint Par of the countries and adjusting this to the actual state of currencies we have:—

The countries being under an effective gold currency £1 is equivalent *in weight of fine gold* to 25.22 francs. Therefore, under the paper currency (£1 having fallen to $\frac{100}{232}$ of its former value, and 1 franc to $\frac{100}{406}$ of its former value) £1 is equivalent *in purchasing power* to

$(25.22 \times 406 \div 232)$ francs or **44.14**.

(The actual exchange quotation was **44.05**, i.e. the exchange, considered in relation to purchasing power, was slightly in favour of France.)

We should, in order to obtain clear ideas upon the causes bringing about changes in the value of money, make certain that we grasp what is meant by *Demand* for Money and the *Supply* of Money. Obviously, Demand is not co-extensive with desire; if it were we should be troubled to

Demand and
Supply of
Money.

put limits to it. There must be some power of satisfying desire; and that power is something that can be sold—the services we can perform, the goods at our disposal, constitute our demand for money. The present demand for money is made up of all the goods on the market and all the services proffered for wages: they make up the *price offered* for money. If that price becomes greater (if more goods are placed on the market, more services are proffered), then the value of money rises (its purchasing power becomes higher): a piece of gold, or its accredited representative, has a greater command; it buys more wheat, it hires more labour.

The Supply of money consists of the money available for purchase, seeking goods or services as the goods or services are seeking money. It is not, of course, money lying idle. But what is this money? Gold, certainly, and the representatives of gold—token coins and bank notes and Treasury notes. The overwhelmingly greater part, however, is not tangible and material; it is intangible and immaterial. The “money” of the money market is credit, banker’s credit; and the violent fluctuations in the supply result from this fact. A mass of such “money” may be annihilated in a moment: a bank failure, for instance, giving a severe shock to public confidence, would do this; political upheavals, disasters to the naval and military forces, anything tending to depression in a nation destroys “money.” On the other hand, anything that raises the public confidence, that tends to a buoyant feeling in the business world, whatever makes manufacturers and traders convinced that all will come right, increases the “money,” the credit, of a country. The quantity of wheat is dependent upon the amount of labour exerted in the fields and upon the genial help of Nature: wheat has a very real post of production. Only in a very restricted sense can we speak of the cost of production of money.

We should note, too, that a coin rapidly transferred, effecting many purchases, is of more importance in the "supply" of money than a coin clinging to its owner. A sovereign stored away is no part of the supply. We need, that is, to take into account the effectiveness of money—its efficiency, or power of doing work. "The nimble sixpence does the work of the slow shilling," the proverb tells us. The old illustration of the effectiveness of money was provided by the pair of enterprising people who prepared against the Derby a barrel of home-made beer. They would sell at sixpence a pint and halve the proceeds. On the road to the Downs John suggests handing over to Tom the one coin between them, a three-penny piece, and of drinking a pint. Tom agrees; but shortly retransfers the coin and drinks his pint. The road being long and the day hot, the barrel was empty when the course was reached: the one small coin in its many passages had caused the whole amount of beer—valued at many shillings—to be bought and sold.

Applying these terms we can make the following statements:

<p>Value of Money restated.</p>	<p>An increasing <i>Demand</i> for money (an eagerness to sell goods) raises the value of money or, in other words, makes prices fall.</p> <p>An increasing <i>Supply</i> of money (an increase in the coin or notes circulating, and especially in the amount of credit available) lowers the value of money, or, in other words, makes prices rise.</p>
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You will recognise that, as a rule, when business is brisk, when goods are being freely bought and sold (*i.e.* when there is a great *Demand* for money) there is also a readiness among traders to trust one another (credit is good, so there is a great *Supply* of money). Whether prices in

general rise or fall will then be dependent upon the relative increase. At times, however, Demand and Supply will move in opposite directions. During the War years, production of the ordinary commodities of trade slackened; men were diverted from the work of production to the work of destruction; the rapid interchange of commodities was prevented through lack of means of transport, for these means were largely occupied in the transference of men and munitions of war; the holders of stocks were reluctant to part with them, since prices were perceptibly soaring. There was little *Demand* for money. At the same time there was, throughout Europe, an astonishing increase in the Supply of money; it grew with a speed not exceeded by Jack's beanstalk. Not only was the ordinary currency supplemented or replaced by paper substitutes, but the various governments—our own included—"manufactured" credit to an enormous extent.

The method of manufacture is clearly explained in the report of the Committee on Currency and Foreign Exchanges after the War (1918): "Suppose, for example, that in a given week the Government require £10,000,000 over and above the receipts from taxation and loans from the public. They apply for an advance from the Bank of England, which by a book entry places the amount required to the credit of Public Deposits in the same way as any other banker credits the account of a customer when he grants him temporary accommodation. The amount is then paid out to the contractors and other Government creditors, and passes, when the cheques are cleared, to the credit of their bankers in the books of the Bank of England—in other words, is transferred from the Public to 'Other' Deposits, the effect of the whole transaction thus being to increase by £10,000,000 the pur-

chasing power in the hands of the public in the form of deposits in the Joint Stock Banks and the bankers' cash at the Bank of England by the same amount. The bankers' liabilities to depositors being thus increased by £10,000,000 and their cash reserves by an equal amount, their proportion of cash to liabilities (which was normally before the War something under 20 per cent.) is improved, with the result that they are in a position to make advances to their customers to an amount equal to four or five times the sum added to their cash reserves, or, in the absence of demand for such accommodation, to increase their investments by the difference between the cash received and the proportion they require to hold against the increase of their deposit liabilities. Since the outbreak of war it was the second procedure which in the main was followed, the surplus cash having been used to subscribe for Treasury Bills and other Government securities. The money so subscribed was again spent by the Government and returned in manner above described to the bankers' cash balances, the process being repeated again and again until each £10,000,000 originally advanced by the Bank of England created new depositors representing new purchasing power to several times that amount."

When the quantity of money increases, other things remaining practically the same, prices go up. When in the beginning of 1915 the Australian troops, their pockets well lined by a munificent government, came to a town—to Alexandria perhaps where the ill-paid French troops had formerly dictated prices—up went prices. The British soldiers' pay fell in purchasing power as it came into contact with the bigger colonial pay. Or rather, as more money came into the town and as the supply of things bought and sold could not be as rapidly increased; even though the enterprising peoples of that cosmopolitan town

did their best to provide means of spending, prices went up with astonishing rapidity.

The *Times* Index Number is comprehensive enough; and you may wish to examine it in detail. An Elaborate Index Number. It sums up the situation at the end of 1921, and the capital diagrams that impress the lessons taught add greatly to its value. The outstanding feature of 1921 is, you note, the steady decline in prices as we came nearer and nearer to the gold standard. The tables, reproduced by kind permission of the *Times*, are given below:—

As compared with the highest point in 1920 the following percentage declines are shown: Cereals, 52·2; meat and fish, 37·2; other food, 53·6; iron and steel, 59·6; other metals and minerals, 57·0; cotton, 71·9; other textiles, 66·1; and miscellaneous articles, 34·4.

The subjoined table shows the actual prices of 60 of the principal commodities at the close of the four quarters of last year and on December 31, 1920 and 1919, with average prices for 1913.

The elaborate tables given, compiled by the Supreme Economic Council, may be of interest. The comparisons possible are many and illuminating. Notice, for instance, how the rise in prices was almost as great in Sweden, a non-belligerent country, as in the United Kingdom.

Notice how the Board of Trade's Index Number keeps consistently above those compiled for the *Economist* and the *Statist*. The first, taking a wider range of commodities, is probably the better index. See the tables below.

COMMODITY.	Dec. 31, 1921.	Sept. 30, 1921.	June 30, 1921.	Mar. 31, 1921.	Dec. 31, 1920.	Dec. 31, 1919.	Aver., 1913.
Food.							
Wheat, Eng., Gaz. 480lb. avgo. ...	44/7	57/1	89/1	88/7	86/9	72/6	31/8
Do., No. 2 N. Man. 496lb. ...	54/6	80/-	85/6	93/-	107/-	59/-	37/3
Flour, Ldn. straights 280lb. ...	47/-	60/-	70/-	69/-	80/-	44/3	27/6
Barley, Eng., Gaz. 400lb. avgo. ...	45/7	63/3	41/-	51/2	72/7	105/10	27/3
Oats, Eng., ... Gaz. 312lb. avgo. ...	28/1	29/6	38/11	35/11	42/9	57/2	19/1
Maize, La. Plata, ex-ship ...	33/-	31/6	42/6	53/-	57/6	67/6	24/3
Rice, No. 2 Burma... cwt. ...	15/-	21/-	17/3	19/-	25/-	26/-	9/9
Beef, English long sides ...	6/6	7/2	8/10	11/4	11/10	10/-	4/3
Do., S. Amer. ohld. 8lb. ...	5/4	5/4	6/8	8/8	6/8	8/-	3/5
Mutton, N.Z. frzn. ... 8lb. ...	3/11	4/8	5/2	5/10	5/-	7/-	3/3
Bacon, Irish, lean ... owt. ...	137/-	174/-	188/-	210/-	230/-	200/6	77/-
Do.; Amer. Cumbd. owt. ...	88/-	100/-	120/-	130/-	190/-	184/6	68/3
Fish* ... stone ...	6/-	5/6	7/2	6/8	6/1	8/4	3/3
Eggs, English ... 120 ...	36/-	27/-	25/-	23/-	53/4	50/-	12/-
Sugar, Eng. ref. cubes owt. ...	51/6	57/6	59/6	73/-	70/-	72/-	18/3
Do., W. Ind. cryst. owt. ...	39/6	43/-	46/9	61/6	62/6	97/-	16/-
Tea, Indian, avgs. ... lb. ...	1/3 $\frac{7}{8}$	1/1 $\frac{1}{2}$	9 $\frac{1}{2}$ d.	10d.	1/1 $\frac{1}{2}$	1/10 $\frac{1}{2}$	9 $\frac{1}{2}$ d.
Cocoa, Trinidad, mid. owt. ...	51/6	52/-	55/6	58/6	73/6	123/6	76/6

* Average price of plaice, cod, and haddock.

Commodity.	Dec. 31, 1921.	Sept. 30, 1921.	June 30, 1921.	Mar. 31, 1921.	Dec. 31, 1920.	Dec. 31, 1919.	Aver., 1913.
Food.							
Cheese, Eng. Cheddar cwt.	112/-	112/-	120/-	158/-	145/-	163/-	73/9
Butter, Danish, fine cwt.	174/-	224/-	206/-	256/-	336/-	252/-	125/-
Lard, Amer. ref., pails ... cwt.	63/3	79/3	81/-	90/-	155/6	198/6	57/3
Potatoes, Eng. good ton	£9	£11	£15	£11	£11	£13/10/-	79/3
MATERIALS.							
Pig iron, Hemt., M'bro. ... ton	100/-	130/-	160/-	180/-	260/-	200/-	72/8
Do., Clevid. No. 3... ton	100/-	120/-	130/-	150/-	225/-	160/-	58/2
Iron, marked bars, Staff. ... ton	£16	£20	£22	£27/10/-	£33/10/-	£25/10/-	£9/12/6
Do., Com. bars ... ton	£13	£16	£16	£24/10/-	£29/10/-	£22/10/-	£7/15/-
Steel rails, heavy ... ton	£9/10/-	£14	£15	£15/10/-	£25	£17/15/-	£6/12/-
Do., boiler plates ... ton	£16	£19	£21	£25	£31	£23	£9/16/3
Do., galvzd. sheets ton	£17/10/-	£20/10/-	£22	£24	£30	£37/10/-	£11/7/-
Do., tinplates ... box	20/-	22/-	27/-	26/-	33/-	51/-	13/6
Copper, electrolytic ton	£74	£72/10/-	£75	£72/10/-	£80	£125	£71/15/-
Do., strong sheets... ton	£98	£103	£112	£114	£130	£157	£85
Tin, stand., cash ... ton	£170/10/-	£156/10/-	£167	£138/15/-	£205/15/-	£341/17/6	£200/2/6
Lead, English ... ton	£26	£24/5/-	£24/10/-	£21/5/-	£25/10/-	£46/10/-	£91/2/6
Spelter, foreign ... ton	£27/2/6	£26/7/6	£27/5/-	£24/5/-	£26	£56/17/6	£22/10/-
Coal, large, steam, Cardiff ... ton	25/8	30/-	45/-	57/-	90/-	110/-	20/6
Do., best gas, Durh. ton	21/6	28/-	40/-	40/-	70/-	100/-	15/3
Do., best hse., Yorks. ton	37/6	36/-	37/2	37/2	37/2	30/-	17/6

COMMODITY.	Dec. 31, 1921.	Sept. 30, 1921.	June 30, 1921.	Mar. 31, 1921.	Dec. 31, 1920.	Dec. 31, 1919.	Aver., 1913.
MATERIALS.							
Petroleum, Amer., ref. gal.	1/4	1/4	1/9½	2/3½	2/3½	1/9½	8½d.
Cotton, Am., fly. md. lb.	11.71d.	15.22d.	7.85d.	8.02d.	9.90d.	30.75d.	7.12d.
Do., Egypt, f.g.f							
Sak... .. lb.	21.50d.	27.75d.	15.50d.	17.50d.	22.00d.	54.00d.	9.84d.
Do., yarn, 32's twist lb.	18d.	22½d.	16½d.	16d.	22d.	52½d.	10½d.
Do., do., 60's Egypt lb.	28d.	39d.	31d.	30d.	34d.	91d.	17½d.
Do., shirtings, 8½lb. piece	16/-	18/4	15/6	16/9	19/6	38/-	8/-
Do., printers ... piece	36/-	43/-	38/-	36/-	47/-	89/-	19/-
Wool, gay., merino 60's.... lb.	17d.	15½d.	12½d.	12d.	18d.	50d.	10½d.
Do., gay. crossbd., 46's.... lb.	7½d.	8½d.	8½d.	7½d.	12½d.	27d.	11½d.
Do., tops 64's ... lb.	50d.	49d.	41d.	40d.	50d.	150d.	29d.
Do., tops 40's ... lb.	12d.	12½d.	13d.	14½d.	18d.	36d.	15½d.
Flax, Lävonian Z.K. ton	£120	£100	£90	£120	£250	£230	£38
Hemp, N.Z. h.p. fair ton	£38	£42/10/-	£41	£45	£54	£54	£28/5/-
Jute, first marks ... ton	£25/10/-	£36/10/-	£30	£32/10/-	£39	£65	£30/15/-
Hides, Eng. Ox, first lb.	8½d.	10½d.	9d.	6d.	7½d.	12½d.	7½d.
Do., Cape, dry ... lb.	9d.	10d.	8½d.	8d.	11½d.	13½d.	11½d.
Timber, gd. deal, 3 x 9 ... stand	£35	£35	£35	£55	£57/10/-	£46	£15
Do., W'cot oak, lin. foot	2/6	2/6	3/-	3/6	3/6	2/6	10d.
Cement, best Portland ton	£3/17/6	£4/3/6	£4/7/6	£4/7/6	£4/7/6	£2/6/6	36/-
Rubber, Plant., sheet lb.	11½d.	8½d.	7½d.	10½d.	10½d.	2/10½	3/1
Linseed Oil ... ton	£28/10/-	£31/10/-	£35	£26/10/-	£41	£108	£24/15/-
Soda Crystals, bags ton	£7	£7	£7	£7	£7	£5/10/-	£2/2/6

PRICE MOVEMENTS.
INDEX NUMBERS OF WHOLESALE PRICES. COMPARATIVE STATEMENT.

Period.	United Kingdom.			Canada.		United States of America.		France.	Italy.	Japan.	Sweden.
	A	B	C	Official.	D	E					
<i>Average.</i>											
1913 ...	116.5	2692 $\frac{1}{2}$	85.0	135.5	100	9.1362	115	126.0	132.2	100	
1914 ...	117.2	2658	86.0	136.1	199	9.9142	118	119.8	126.3	116	
1915 ...	143.9	3313 $\frac{1}{2}$	106.9	143.0	100	9.9270	162	167.2	127.8	145	
1916 ...	186.5	4322	135.6	182.0	123	11.9408	218	251.6	154.9	185	
1917 ...	243.0	5496 $\frac{1}{2}$	175.2	237.0	175	15.8142	302	385.0	196.4	244	
1918 ...	267.4	6056 $\frac{1}{2}$	192.5	278.3	196	18.7363	392	515.5	259.0	339	
1919 ...	296.3	6332 $\frac{1}{2}$	205.6	293.2	212	18.7404	412	460.9	316.6	330	
1919 June	277.8	6188	199.4	284.1	207	18.8964	380.0	451.0	301.6	324	
July	291.6	6450	208.4	294.0	219	20.0017	403.0	456.6	326.8	320	
Aug.	299.8	6503	212.7	301.1	226	19.4720	401.7	465.5	332.2	321	
Sept.	308.2	6587	214.8	301.5	221	19.5215	416.2	468.3	340.5	319	
Oct.	323.8	6795	224.3	299.6	223	19.9026	441.4	492.0	352.1	307	
Nov.	336.6	6985	231.0	307.7	230	20.1756	468.2	552.9	370.2	308	
Dec.	345.8	7364	235.2	322.7	238	20.3638	488.6	576.2	381.5	317	
1920 Jan.	356.5	7768	245.3	336.4	248	20.8990	562.7	634.7	398.0	319	
Feb.	368.5	8160	260.4	343.5	249	20.7950	603.3	701.0	414.6	342	
Mar.	375.1	8352	261.4	349.0	253	20.7124	641.0	780.0	425.2	354	
April	374.3	8232	266.1	353.1	265	20.7341	679.2	865.7	397.2	364	
May	371.7	8199	260.0	356.6	272	19.8752	635.9	830.3	359.7	361	
June	393.4	7847	255.7	349.3	269	19.3528	569.6	773.5	327.7	366	
July	404.0	7876	254.6	346.8	262	18.8273				364	
Aug.	379.1	7743	253.5		250	17.9746			316.6	365	

A.—PUBLISHED RESULTS.

A.—Board of Trade Index Number. B.—Economist Index Number. C.—Statist Index Number.
D.—Bureau of Labour's Index Number. E.—Bradstreet's Index Number.

PRICE MOVEMENTS.

INDEX NUMBERS OF WHOLESALE PRICES. COMPARATIVE STATEMENT.

Period.	United Kingdom.			Canada.	United States of America.		France.	Italy.	Japan.	Sweden.
	A	B	C	Official.	D	E	"Statistique Générale"	"Bachi" Index No.	Bank of Japan's Tokyo Index No.	"Svensk Handels-tidning."
B.—EXPRESSED AS A PERCENTAGE OF 1913.										
Average.	100.0	100.0	100.0	100.0	100	100.0	100.0	100.0	100.0	100
1913 ...	100.6	98.7	101.2	100.4	99	97.0	102.6	95.1	95.5	116
1914 ...	123.5	123.1	125.8	109.2	100	108.1	140.9	132.7	96.7	145
1915 ...	160.1	160.5	159.5	134.3	123	130.0	189.6	199.7	117.2	185
1916 ...	208.6	204.1	206.1	174.9	175	172.2	262.6	306.3	148.5	244
1917 ...	229.5	224.9	226.5	205.4	196	204.0	340.9	409.1	195.9	339
1918 ...	254.3	235.2	241.9	216.4	212	204.0	358.3	365.8	239.5	330
1919 June	238.4	229.8	234.6	209.7	207	205.7	330.4	357.9	228.1	324
July	241.7	239.6	242.8	217.0	219	217.7	350.4	362.4	247.2	320
Aug.	257.3	241.5	250.2	222.2	226	212.0	349.3	369.4	251.3	321
Sept.	264.5	244.6	252.7	223.5	221	212.5	361.9	371.7	257.6	319
Oct.	277.9	252.4	263.9	221.1	223	216.7	383.8	390.5	266.3	307
Nov.	288.9	259.4	271.8	227.1	230	219.6	407.1	438.8	280.0	308
Dec.	296.8	273.5	276.7	237.8	238	221.7	424.9	457.3	288.6	317
1920 Jan.	306.0	288.5	288.6	248.3	248	227.2	489.3	503.7	301.1	319
Feb.	316.3	303.1	306.3	253.5	249	226.4	524.6	556.3	313.6	342
Mar.	322.0	310.2	308.0	257.6	253	225.5	557.4	619.0	321.6	364
April	321.3	305.7	313.1	260.6	265	225.7	590.6	679.1	300.5	354
May	318.2	304.5	305.9	263.2	272	216.4	553.0	659.0	272.1	361
June	337.7	291.4	300.8	257.8	269	210.7	495.3	613.9	247.9	366
July	346.8	292.5	299.5	255.9	262	205.0			239.5	364
Aug.	325.4	287.6	298.2		250	195.7				365

A.—Board of Trade Index Number. B.—Economist Index Number. C.—Statist Index Number.
D.—Bureau of Labour's Index Number. E.—Bradstreet's Index Number.

PRICE MOVEMENTS.
UNITED KINGDOM—BOARD OF TRADE INDEX NUMBER.
 (Basis: Average of 1900 = 100.)

Period.	Group I. Metals and Minerals.	Group II. Textile Raw Materials.	Group IIIa. Corn, Grain, &c.	Group IIIb. Meat, Fish, and Dairy Produce.	Group IIIc. Colonial Produce, Tobacco.	Group IIId. Beverages.	A.—PUBLISHED RESULTS.		Total, Group III.	Group IV. Sundry Materials.	Total Index No. All Groups.
1913	92.53	134.98	118.57	119.55	106.79	106.43	117.68	109.44	116.51		
1914	86.71	128.80	118.19	122.73	127.04	102.07	120.93	111.25	117.21		
1915	116.70	119.82	163.75	145.88	169.75	87.78	154.11	143.77	143.87		
1916	165.81	180.09	209.49	175.09	196.73	103.55	189.40	204.04	186.54		
1917	182.01	270.39	272.50	228.81	248.63	136.73	246.23	256.26	243.03		
1918	354.44	354.44	259.29	261.74	256.87	210.56	259.29	268.56	267.42		
1919	280.23	373.30	287.53	273.16	284.72	244.99	279.43	316.55	296.26		
1919 June	248.86	332.08	267.69	251.19	257.53	238.44	257.98	374.43	277.76		
July	274.43	349.86	253.49	232.70	276.24	254.73	255.30	376.71	281.63		
Aug.	290.71	365.68	293.51	235.41	272.83	237.17	272.23	410.72	299.79		
Sept.	320.60	362.28	304.01	261.35	274.37	246.16	279.23	419.80	308.16		
Oct.	339.32	388.68	305.38	289.92	301.08	255.40	296.44	400.76	323.76		
Nov.	340.60	404.54	311.33	297.21	317.02	259.85	304.03	463.85	336.56		
Dec.	331.94	443.48	322.15	300.45	332.07	271.09	314.43	438.76	345.80		
1920 Jan.	354.73	512.21	328.44	312.53	323.25	267.82	318.99	381.93	356.48		
Feb.	379.80	534.90	337.14	309.59	436.53	272.82	331.92	361.55	368.52		
Mar.	390.46	580.21	340.70	308.63	403.63	253.82	329.74	357.11	375.11		
April	400.72	554.53	353.28	298.47	473.69	294.06	331.99	357.12	374.34		
May	415.93	551.71	363.88	271.74	456.31	300.75	326.51	351.37	371.65		
June	421.59	576.38	400.87	271.81	541.21	279.42	348.91	383.26	393.43		
July	451.82	563.64	417.53	297.03	512.43	244.86	364.40	371.53	404.03		
Aug.	460.78	518.88	359.35	298.57	479.07	251.29	339.00	337.40	379.13		

PRICE MOVEMENTS.
UNITED KINGDOM—BOARD OF TRADE INDEX NUMBER.
 (Basis: Average of 1900 = 100.)

Period.	B.—EXPRESSED AS A PERCENTAGE OF 1913.						Total, Group III.	Group IV. Sundry Materials.	Total Index No. All Groups.
	Group I. Metals and Minerals.	Group II. Textile Raw Materials.	Group IIIc. Corn, Grain, &c.	Group IIIb. Meat, Fish, and Dairy Produce.	Group IIIc. Colonial Produce, Tobacco.	Group IIIc. Beverages.			
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914	93.7	95.4	99.7	102.7	110.0	95.9	102.8	101.7	100.6
1915	126.1	88.8	138.1	122.0	159.0	82.5	131.0	131.4	123.5
1916	170.2	133.4	176.7	146.5	184.2	97.3	160.9	186.4	160.1
1917	196.7	200.3	229.8	191.4	232.8	128.5	209.2	234.2	208.6
1918	221.5	262.6	218.7	218.9	240.5	197.8	220.3	245.4	229.5
1919	302.9	276.6	242.5	228.5	266.6	230.2	237.4	289.2	254.3
1919	269.0	246.0	225.8	210.1	241.2	221.0	210.2	342.1	238.4
June	296.6	259.2	213.8	211.4	258.7	230.3	216.0	344.2	241.7
July	314.2	270.9	247.5	213.6	265.5	241.0	231.3	375.3	257.3
Aug.	346.5	268.4	256.4	218.6	256.9	231.3	237.3	383.6	264.5
Sept.	360.7	288.0	257.6	212.5	281.9	240.0	251.9	366.2	277.9
Oct.	368.1	299.7	262.6	248.6	297.4	214.2	258.4	423.8	288.9
Nov.	358.7	323.6	271.7	256.3	311.0	251.7	267.2	400.9	290.8
Dec.	383.4	370.5	277.0	261.4	302.7	251.6	271.1	349.0	306.0
1920	410.5	396.3	284.3	259.0	408.8	256.3	282.1	321.2	316.3
Jan.	422.0	429.8	287.3	258.2	378.0	238.5	280.2	326.3	322.0
Feb.	433.1	410.8	298.0	241.3	443.6	276.3	282.1	326.3	321.3
Mar.	449.5	408.7	306.9	227.3	427.3	282.6	277.5	321.1	319.0
April	455.6	427.0	338.1	227.4	506.8	292.5	296.5	350.2	337.7
May	488.3	417.6	352.1	248.5	479.8	230.1	309.7	339.5	346.8
June	498.0	384.4	303.1	249.7	448.6	236.1	288.1	308.3	325.4
July									
Aug.									

CHAPTER IX.

BANKING AND THE MONEY MARKET: CREDIT.

We spoke, in Chapter I., of the manner in which the invention of Money enabled men more readily to co-operate with one another. Usually without any formal agreement, men have concurred in accepting a measure of value and a medium of exchange. This concurrence, tacit or declared, has enabled trade and division of labour—with all its economic advantages—to develop. Consider, now, how Credit operates in the same way. For when we speak of money we do not think merely of coin, or even of coin and bank notes. We include all instruments and tokens that serve readily to effect the transfer of property from one owner to another. A merchant relinquishes his goods, a landowner gives up the evidence of his ownership, in return for a slip of paper. Are these the acts of reasonable men? Why are we perfectly contented, in return for the services we have rendered, to take the more or less bulky parcel of bank or of Treasury notes proffered to us, or the cheque enabling us to make good our claims on a person other than the one we have benefitted? Our ever-so-many-times-great-grandfather in Queen Elizabeth's day would have wanted something more substantial than pieces of paper, even though bearing the mark of the State. He had not become habituated to the economising expedients.

We take the notes not at all because we want to keep them—to paper our houses, to light our fires with them; we take them because we are perfectly sure that, when we wish to obtain food or clothing, when we wish to repay another for services rendered to us, we shall be able to do so by their means. Others will be willing to accept them from us at the valuation at which we accepted them; and the one property required of money is that it shall be readily acceptable. Whatever is readily acceptable may be money. In our times, confidence between man and man, the conviction that men will fulfil their obligations, has so grown that we take a promise for the performance. The promise of a dinner to-morrow will not satisfy my hunger to-day; the promise of a new suit next Spring will not enable me to go gaily clad next Sunday. But the promise of gold will do as good service in facilitating exchanges as the gold itself does. The promise is an undertaking and a certificate. But then the gold piece itself may, as money, be looked upon as no other than such an undertaking and certificate. As a certificate it gives assurance to the world at large that its holder has done good service for the community; has helped to produce the wheat for its bread, the wool for its clothing; he has entertained his fellows by song and dance; he has written a book that the world will not willingly let die; he has painted a picture from which generations to come will draw inspiration; he has conferred benefits upon them by directing the affairs of a great empire. In one way or another, he has contributed his portion to the general store; and the coins or notes bear witness to the fact. As an *undertaking*, the note or coin is a promise from the community to supply its holder with whatever he requires—up to the amount of the certificate. We could, indeed, imagine a state of things in which, even though money were not in question, men would thus con-

tribute to a common fund of comforting things, certain that on request they could draw from that common fund. We have not yet reached such a state, but by the use of paper, representing money and taken in lieu of it, we have approached it.

Similarly, we could, giving our imagination further exercise, picture to ourselves a central warehouse, into which the nations of the world conveyed their products, receiving from the storekeeper a certificate for the value of their goods. By means of "titles," the paper that by usage of merchants has become not alone the representative of goods but the accepted evidence of property in the goods, this is, in fact, realised. Rights to property become identified with the market value of property: and at that value pass as readily as the gold in which they are measured. The Bill of Lading, for example, stands for a shipment of wheat on the sea from Karachi to London. During the voyage the ownership of the wheat has changed several times; the Bill of Lading has been accepted in faith for the wheat; and the wheat has, we may in our optimism suppose, passed into hands that can make the most use of it. To be sure, the coins or notes we get do not, as such an instrument does, specify the goods upon which they constitute a claim. That matters little; it simply leaves to us the option of directing our demand to those things that, at the moment, make the strongest appeal to us. Money gives us a general authority; a Bill of Lading, a Warehouse Receipt, or a Wheat Certificate, gives us a special authority. Money, whether in the form of coin or of paper, is an option bearer. The Bill of Lading entitles its holder to specified goods. The essence is the same, however. All are certificates entitling the holders to claim goods—in small part of their own production, in very large part of others'

production. They all—the money that is potentially anything, the “titles” that are identified with specified property—enable us, while obscuring the fact, to co-operate with one another. The more claims we have, the more we can enjoy; but the claims are not our real income; they are merely an intermediate step towards it.

We are told that one of the American plutocrats, giving a spectacular feast, proudly boasted that the
 Our Close
 Dependence
 upon Others. uttermost corners of the earth had been ransacked to provide the luxuries that furnished the tables. Probably he was right.

But is there one among us who, having enjoyed his Sunday dinner, might not complacently say the same? Australia and the Indies, America and the Isles of the Pacific have sent their products. Why? What claim had we upon the coffee grower in Java that the fragrant berries should be put at our disposal? What claim upon the New Zealand settler that his land should feed sheep to provide a chief dish? What claim upon the farmer in the next county that he should send us potatoes? The one claim is that we have served others; we have a certificate to that effect—a tangible golden certificate, or, more usually, one of which the visible signs are figures in a banker's book—and our transfer of the certificate is our demand for the products. We have grown into one corporation with the world at large, and we feel the effects of the fortunes of men throughout the world. Is there a drought in New South Wales? Then our next winter's suit will cost us more. Does revolution break out in the Argentine? Then leather for our boots will be difficult to get, and Northampton will have its problem of unemployed intensified. A bountiful harvest in Canada reduces the price of wheat, biscuits—now a luxury for the few—become a comfort for the many, and Reading works at greater pressure. The extraordinary

development in our dependence upon people whom we shall never see has come about through (1) a material factor, *the amazing improvement in transport facilities*, and (2) an immaterial factor, *the extension of our money and credit system*.

The twentieth century trader is dependent upon credit facilities; his medieval predecessor was, at any rate by the decrees of the Church, deprived of them. The exaction of interest was called usury much in the same manner as we, wishing to convey rebuke, called the making of profits, "profiteering." Then it was that men like the Merchant of Venice condemned those who took "a breed of barren metal of his friend." Business men were in a strait between two perils: "He who practiseth usury goeth to Hell, and he who practiseth it not tendeth to destruction." In 1253, we find Roger, Bishop of London, "a learned and religious man," inveighing against the Causini, natives of Cahors, who with the Lombards thrived as moneylenders: "In those days the abominable Plague of the Causini raged so fiercely that there was scarce any man in England not entangled in their net. They beguiled the indigent in their necessities, cloaking their usury under the pretence of trade, and feigning not to know that whatsoever payment is added to the principal is usury, under whatsoever name it is called." For those that needed temporary accommodation charitable banks were set up; "many burgesses of cities and places of England have set aside a certain sum of money to be lent to the poor without interest, by trustworthy persons, that they may not be oppressed or devoured by usury." But the convenience of the system prevailed, as it was bound to do. The Church was reluctantly obliged to give way: and the State felt itself constrained to limit, for the benefit of the borrowers, the amount that might be

Interest or
Usury?

exacted by usury. Our own Usury Laws were, in fact, only abolished in 1854 after much trenchant criticism by Jeremy Bentham. The one survival we have over of interference with the rate of interest is provided by our Moneylenders Acts of 1900 and 1911. These do not prescribe what shall be regarded as a fair rate of interest. But they enable the Judge, in any action taken by a moneylender, to re-open and revise the transaction if in his opinion the terms are unfair; if "the transaction is harsh and unconscionable."

It is sometimes asserted that the development of credit has brought us back to barter: "The tendency is, by altogether doing away with the instrument of exchange to bring us back to the direct exchange of commodity for commodity, in fine, to barter." This must, however, be interpreted with a difference. Barter as the result of the development of money economy is very different from primitive barter. For money is not only the actual *medium* of exchange; it is also the *standard* to which the values of all other commodities are referred. The suppression of the first function does not involve the suppression of the second. Rather, this second function becomes of the greater importance: the material money is absent, but its now theoretical value still serves us as the measure of other values. We do not handle the sovereign, yet it remains the standard of value. All that is required to enable it to remain so is a link between gold and paper; the sovereign need not circulate. There must, however, be no difficulty in obtaining gold for export or for manufacture. - The introduction of money, metallic or other made commerce practicable; but men did not at a bound reach the abstract notion of money as merely measuring value. Yet, as commerce increased and reciprocal dealings

Absence of
Money not
Necessarily
Barter.

became more numerous, the device of representative money was bound spontaneously to suggest itself. Then all that changed hands to consummate exchanges was a piece of paper transferring a title to money. A man has a *right to gold*; by transferring this right he commands the goods and services of other men. No material money need change hands except between institutions like banks, where the traders keep their money. A further stage is reached when all banks keep their balances in one central bank. Then all money transactions simply mean ultimately a transfer of credit in the books of this central institution. By means of this transferring of credit we have certainly a return to barter, but with the advantages of a money economy. We extend the idea, too, to foreign trade; where the Bill of Exchange operates as the instrument whereby claims to gold are transferred. In foreign trade, because money measures, exports and credits pay for imports and debts; the gold shipped from time to time is a commodity sent to make up for deficiencies in other directions.

We may sum up the matter in this way. From the primitive method of bartering goods for goods, exchange gradually developed to the notion of a standard or measure,—the accepted value of an ox, or a slave, or a woman, or a quantity of wheat, or a weight of metal. The best measure ultimately comes to be those means of exchange that are most durable and (being most precious and so taking up least space) are the handiest. That is, gold and silver, of officially certified weight and fineness, have become the coin and currency of nations. And as the volume of trading transactions grew, the more precious metal became the one standard; and the silver assumed a merely subordinate place. A further step is the acceptance

Summing up
the Matter.

of a note (certifying ownership of metal) instead of the handling of metal coins. People have faith in the Government or in the bank issuing the note; and Credit begins. When payments are effected for the most part by means of cheques, which transfer credits, we have the modern banking system. There has been a steady diminution in the trouble, in the risk, and in the delay of transferring property.

A business man nowadays pays his way by passing on the evidences of indebtedness to him; and that is all he need do. He can show that money is due to him, and the bank manager, accepting this evidence, exchanges the bank's credit for the customer's.

THE BANKER INDISPENSABLE IN MODERN TRADE.

We may put it that the Banker and the facilities he affords are indispensable to the trader, who must usually wait long between the initiation of a transaction and its conclusion. A long interval passes before the clay and timber, the glass and iron, becomes a house habitable by man. Trading operations at all protracted would be impossible unless based upon Credit; no trader could afford to lock up his Capital indefinitely. The banker enables him to turn not only his credits but his very property into liquid purchasing power: the Bills payable in three months are discounted and present "money" provided, or the property is represented by a security and an overdraft granted on it. The banker turns present or prospective property into present purchasing power.

In fact the trader, the middleman who to-day plays so great a part in the world's work, developed
 The Beginning of Credit. and could only develop as banking and credit facilities developed. Extended commerce and banking facilities were mutual cause and effect. The method

of accepting matters on trust early arose among us; and among us is even now more widespread than elsewhere. We are not more credulous, more gullible than the rest of mankind. We have only had longer experience in finding out that men ordinarily perform their obligations. In Stuart times, when the man that specialised in "distributing" goods became prominent, the want of a place where money could be borrowed and where surplus cash could be put into safe keeping was keenly felt. Traders with a temporary surplus would entrust their money to an individual goldsmith or would send it to the London offices of the Goldsmiths Company. The Company at first stored the money and charged a fee; but later lent a portion at interest to other traders. The Company thereby made a profit from the stored money; but no one was harmed provided that depositors were always able to get their money on demand. Clearly, it was worth while to devolve upon others the responsibility of preserving one's wealth, though no doubt hoarding was common. The father of Pope, we are told, when retiring from his linen drapery in the Strand about this time, carried to his country retreat a strong box containing nearly twenty thousand pounds, and took from it what was from time to time needed for his household expenses. To-day, however, the hoarding of valuables is resorted to only when political insecurity threatens savings. During the deplorable experiences of Russia in 1918-21, men were thrust back into the practices of primitive life: money came to be regarded in its very early sense of a store of value. Credit was dead and metal money alone served in exchanges.

The Goldsmiths Company extended their banking business in two noteworthy directions. The receipts for money deposited with them began to circulate as equivalents of the money deposited; these receipts became, that is,

something like our modern banknotes. The traders, too, who had deposited their money with the Company, having payments to make, would by a simple device avoid the trouble and delay of withdrawing their deposits. They began to give their creditors a note to the officials of the Company asking them to pay the person named. So began the system, now so overwhelmingly predominant in the business world, of payment by cheques. One of the earliest "cheques" in this sense was that by which the Duke of Bolton transferred to Titus Oates, the notorious informer, a part of the money deposited with Mr. Francis Child. This gentleman is said to be the first of the goldsmiths that gave up the dealing in jewellery and restricted himself to "banking." It is an illustration of reasonableness of our confidence in the custodians of our savings that we find the firm of Child still doing business "near Temple Bar." Here is the cheque, which you can compare with some of those which happily reach you:—

July 30th, 1689.

Sir,—On sight hereof pray pay unto Ye Rev.
Doctor Tytus Oates or his ord^r ye sum of Fifty
Pounds and place ye same
to the account of

Y^r assured friend,
Bolton.

To Mr. ffr. Child,
Near Temple Barre
£50 These

The essentials of our modern cheque are here, you note. This early cheque is an order to a banker to pay on demand a definite sum to an ascertainable person. Our orders may be couched in more peremptory fashion; but the substance is the same. Our cheques, too, are usually on

specially prepared pieces of paper; though you should note that a cheque may be drawn upon any piece of paper at your disposal. And in our days the State, seeking in multitudinous ways to raise money to cope with its enormous expenses, directs that a stamp duty of twopence shall be paid upon each cheque.

THE ESSENCE OF THE CHEQUE.

The cheque is essentially *an order upon the Banker*; and, since in our country the habit and disposition to give credit is so generally diffused, payment by cheque has become the chief economising expedient for money. Obviously, if the trader making the payment and the trader receiving it kept their money with the same banker no money need pass. A few entries in the banker's ledger would suffice; an amount would be transferred from the credit of the payer to that of the receiver. If all London business men kept their cash at the same banker's and made payments by cheque, no money need intervene for transactions beginning and ending in London. And since the Clearing House arrangement makes all the City Banking houses virtually into one establishment, this ideal is pretty well attained in fact. The number of cheques presented at a bank counter for payment in cash is quite insignificant; the great majority are settled by the method of compensation at the Clearing House, orders against one bank being balanced by orders upon another.

A cheque is a Bill of Exchange drawn on a banker, signed by the drawer, who requires the banker to pay on demand a definite sum of money, either to a specified person or to his order, or to the bearer. The definition according to the Bill of Exchange Act, 1882, is "A Bill of Exchange drawn on a banker, payable on demand." As examination of any of the common forms of cheques will

show, the cheque is a written command : it is couched in the imperative mood, the person having a credit at the banker's is in the dignified position of being able to issue orders to that banker. And the banker will obey ; for he has undertaken an obligation to honour his customer's signature up to the extent of that customer's credit. The cheque (or *check* of which the word is a variant) was originally the counterfoil (or indent) of an exchequer bill, or any draft form of payment ; on the counterfoil were registered particulars of the principal part. There was, therefore, a check on forgery or alteration. The banker, or other person to whom payment was made, retained the cheque ; the customer obtained a "draft," or drawn note.

The cheque in effect assigns to a creditor part of the funds at the debtor's disposal ; and its usual effect is merely to alter figures in the bankers' ledgers. The creditor's account is increased, the debtor's account is decreased by the amount of the cheque. This is particularly so with crossed cheques, "Cheques drawn so that they may not be paid." The crossing assures that the cheques will in any event be paid only through a banker ; the amount is first credited to an account. In fact, they are very rarely turned into cash.

The cheque system is good in this respect that it is perfectly elastic, expanding and contracting with the needs of commerce. A cheque is born at command and is extinguished by use. When trade is brisk many cheques are drawn ; when trade is slack few cheques are drawn. Prices are kept steady through such self-adjusting mechanism of exchange ; for as the cheque increases the quantity of money so the commodity changes hands. Redemption is speedy and its currency is not hampered by restrictive laws. Cheques cannot, however, serve except between people who know and trust one another : they are not

legal tender; no one is obliged to accept them in payment, and they are inapplicable for small retail transactions.

The cheque is the bank note of individuals. Both cheques and bank notes are credit instruments; the holder of a cheque is the creditor of the drawer; and he takes the cheque believing that the drawer has funds sufficient to meet it in the bank. The holder of the note is a creditor of the bank itself, and he takes the note believing that the bank will be prepared at any moment to give him cash in lieu. If, having sold my motor bicycle to John Jones for £10, I accept from him two £5 notes, I do so because I trust the Bank of England. If I take his cheque I do so because I trust him and his bank: I believe that he has funds at the bank and that the bank is a sound one. Both notes and cheque form part of our currency. There are differences, however. In our country, as in all countries where banking has developed to any extent, devices are employed for giving special security to bank notes. The machinery of the Bank Charter Act is mainly for that purpose. Cheques, however, may be multiplied without restriction; they are in fact limited only by the moderation of bankers and the amount of security that their customers—to whom overdrafts are granted—are able to provide. (The overdrafts are, of course, not above the fund against which cheques are drawn. They are, however, the part of credit that the banker is primarily responsible for.) The United States Legislation has, indeed, framed regulations in the interests of depositors, and constrains the banks to maintain a prescribed ratio of reserves to deposits. Even there, however, depositors are far less safeguarded than note holders. Among us, the drawers of cheques and those to whom cheques are paid are supposed to be able to look

The Cheque
differs from
the Bank note.

after themselves. The holder of a bank note has been obliged to take it in payment; it is (now that the Bank of England has a monopoly of note issue in this country) legal tender. Moreover, the bank note is the instrument by which small savings may be accumulated. The definite "circulation" of notes demands safeguards. The cheque, on the other hand, is not legal tender, the creditor need not take it, and in the event of the cheque's being unpaid the debt is not cancelled. A cheque has a very limited circulation; it does not pass from hand to hand like the bank note, but its goodness is almost at once put to the test. The distinction, growth of custom as it was, has been crystallised into law. The taker of a bank note becomes at once the creditor of the bank, can look to it only for payment. The taker of a cheque is still the creditor of the drawer until the bank pays. If the bank refuses, for one reason or another, to pay, it is not the taker of the cheque but the drawer that has right of action against the bank. The bank is liable to the depositor, not to the cheque holder; unless, indeed, by failing to present the cheque within a reasonable time the latter substitutes himself as creditor to the bank.

If, for example, I am paid by a cheque and, through negligence or carelessness, fail to present it within a reasonable time, the bank upon which it is drawn may fail before presentation. Then it is that I, not the drawer, lose on the cheque.

Our plan of looking after notes and leaving the more important instrument of credit quite unrestricted is, perhaps, not logical. Every trader is interested nowadays in the soundness of the banks. He is in practice obliged to have his bank account and to acquiesce in the cheque system; he should be able to count upon the ability of the banks to meet their obligations. Public concern for

banking is not now in regard to notes, but to deposits and cheques drawn against deposits.

An old case, *Miller v. Race* (1758), sums up the legal aspect of a bank note. What was then laid down still rules, and is not likely to be changed. They are "not goods, or securities, or documents for debts; but are money, cash, in the ordinary course and transactions of business." They were declared to be "as much money as guineas themselves are, or any other current coin"; they pass by a will that bequeaths the testator's money; on payment of them a receipt is always given as for money; on bankruptcies they cannot be followed as identical and distinguishable from money. One of the counsel had sought to establish a parallel between bank notes and lottery tickets. But the judges held that the lottery ticket is "identical and specific"; and a specific action will lie for its recovery. Land itself is not more specific than the lottery ticket, for one is a prize, another a blank. The bank note, though it bears a number, is the same as another bank note of the same denomination. "No dispute ought to be made with the bearer of a cash note, in regard to commerce and for the sake of the credit of these notes; though it may be both reasonable and customary to stay the payment, till inquiry can be made whether the bearer of the note came by it fairly or not."

The course of trade creates a property of the note in the assignee or bearer. "'Tis pity that reporters sometimes catch at quaint expressions that may happen to be dropped at the bar or bench; and mistake their meaning. It has been quaintly said, 'that the reason why money cannot be followed is, because it has no ear-mark'; but this is not true. The true reason is upon the currency

of it. So in case of money stolen, the true owner cannot recover it after it has been paid away fairly and honestly upon a valuable and *bona fide* consideration: but, before money has been passed into currency, an action may be brought for the money itself." •

This holds, you note, for all "negotiable instruments," including cheques. You may know who has a cheque that has been stolen from you. But if the holder can show that he obtained the cheque in the ordinary course of business, in a quite straightforward and honourable way, *i.e.* without notice that it had previously been stolen, you cannot recover it; and he is entitled to payment.

To an extraordinary extent, then, the modern business man is dependent upon the banker and the banking system. One enthusiastic writer, *The Banker finances Modern Trade.* wishing to emphasise the dominating influence exercised by the banks, declares that the cessation even for a day or two of the banker's activities would cause a complete paralysis of the economic life of the nation. Such a cessation would produce swifter and more far-reaching effects than the strike of the most effective Labour Union. The merchant works by means of the credit facilities he enjoys, and he would have no facilities. Unable to discount the bills he held, unable to cash the cheques paid to him, he could not meet the obligations constantly falling due, and must become bankrupt. The manufacturer making for a market distant in time and place, depends upon the support of the banks; and that support failing he must cease work. Whether money is scarce or plentiful, whether over-drafts are hard or easy to obtain, is a matter of supreme importance to the trader. The stock he has bought is carried on credit; if the banker, the interpreter of the financial state

of the country, restricts the credit then the trader is obliged to "unload," to sell his stocks with as little sacrifice as possible.

The picture drawn of the banker's work is little exaggerated. True, the banker is only a middleman; he connects the people who save with the people who are able to employ savings in the creation of wealth. In our country, at any rate, people have a deep-rooted confidence in the security of funds entrusted to others. They are willing to deposit with the bankers and content themselves with moderate interest upon their deposits. Unwilling or unable to use their accumulated savings themselves, they provide the means whereby the banker meets the needs of those that work and trade on borrowed capital. "Our people," says Bagehot, "are bolder in dealing with their money than any continental nation, and even if they were not bolder, the mere fact that their money is deposited in a bank makes it far more obtainable. A million pounds in the hands of a single banker is a great power; he can at once lend it where he will, and borrowers can come to him; because they know or believe that he has it. But the same sum scattered in tens and fifties throughout a whole nation is no power at all: no one knows where to find it or whom to ask for it. Concentration of money in banks, though not the sole cause, is the principal cause which has made the money market of England so rich, so much beyond that of other countries."

The banker, you note, is a dealer in credit. He does not create capital: he only enables it to be transferred from the possession of those unable to or unwilling to use it, into the possession of those able and anxious to use it. Even so, however, his work is of the greatest benefit to the

He connects
the Savers
with the
Spenders.

A Dealer in
Credit.

community. For capital is the produce of past labour employed in order to help present labour. Unless capital is employed by labour it perishes; the food the worker might have eaten decays, the clothes he might have worn nourish moths, the machinery whereby he might have exercised his skill rusts away. In a community like ours there are numbers, professional men for example, doctors and lawyers and—rarely—teachers, who earn more than they spend. They themselves have neither the time nor the inclination to employ the surplus in setting workers to work; they deposit their claims to it at the banker's. Then the employing class, the trader or the manufacturer who can give good security or can show reasonable prospects of gain, obtains the use of it. The surplus bears fruit abundantly whereas, unemployed, it would at best remain intact. The more readily those that know how to employ capital find access to it, the better for all concerned. The banker does not increase the productive funds of a country; he does call those funds into activity. Those who save not only have their savings preserved for them, but receive also a present benefit; those who have industrial talent and organising power obtain means of using those capacities for the increase of public wealth. *One essential function of banking is the mobilisation of capital for use in the varied activities of industry and commerce.* The leading principle of our system is that the loans are of a purely temporary nature, that it is the financing of commodities in process of manufacture and distribution up to the time they enter into consumption when the payment from the consumer liquidates all cost. Our banks, unlike those noted below, do not themselves undertake industrial and trading functions, do not themselves promote companies, they do provide a large part of working capital. (See Appendix VII.)

Why should the manufacturer or the trader need credit ?

One reason, constantly operating, is the length of time that usually elapses between the obtaining of the raw material and the payment by the consumer for the finished article, between the mining of the iron-ore at Bilbao and the selling of the Sheffield knife to the West African negro; between the gathering of the pods of the cotton tree and the exposure for sale of Manchester goods in the bazaar at Calcutta. Manufacturers are obliged to make in advance of the actual demand for their goods. These are carried in stock pending the sale to the retailers. And even if made to order the long production process needs financing: the publisher gets under way and incurs expenses this year for next year's books. Industry is complicated, the manufacturer tries to foresee the requirements of a market distant in time, perhaps in place; trade transactions are usually credit transactions, the merchant gives three, sometimes six months' credit. The man who in the preparatory stage smelts the iron or spins the cotton, who has added to the value to the raw material, wishes to be paid for his work long before the consumer liquidates the whole amount due. The manufacturer who makes the knife or the spade or the flowered muslin wishes to carry on work while his product is being distributed. The manufacturer or wholesaler draws a three months' bill, so that his business may be a continuous one, not an alternation of working and waiting. Credit facilities, that is, the activities of the banker, are called for at every stage of the long production process.

The banker facilitates exchanges; for he provides the faith money by means of which exchanges are for the most part effected. We know that money is not merely the gold and silver coins that in those comfortable days before the

The Long
Production
Process.

Provision of
Money.

War circulated among us: money is whatever instrument, token, or expedient serves the most readily and economically to effect the transfer of property from one owner to another. In this sense of money the cheque is the result of the development since 1844 of the large joint-stock banks.

So long as credit is good, so long as people have confidence in one another, the cheque is a perfect money. In comparison with it sovereigns are cumbersome: a million sovereigns weigh something like seven tons, and transactions of any magnitude would be almost impossible if weights of gold had to pass. The cheque has well-nigh superseded bank notes in use. By its means each customer of a bank issues his own notes for the exact amount he needs; the quality of the notes is speedily tested; and the banker becomes the ledger keeper of the business community, the result of a trading operation being simply an alteration of figures in his books.

We may thus sum up the advantages the business man derives from the banking system:—

(i) He is enabled to convert his own credit (which has a narrow currency) into the bank's credit (which has a wide currency). He obtains in his cheque book a *generally acceptable* medium of exchange.

(ii) He is enabled to share in the profits from the use of capital that is for a time idle in the hands of its owners.

(iii) He is enabled to make his own credit instantly and cheaply available at points distant from his place of business.

CHAPTER X.

FUNCTIONS AND ECONOMIC SIGNIFICANCE OF BANKING AND THE CREDIT SYSTEM.

The outbreak of war in the August of 1914 gave a striking proof of the dependence of business upon banking. Trade is transacted, nowadays, not by means of coin but by means of bankers' credits. Credit is confidence; and, when the abrupt stoppage in business came, confidence for a great part disappeared, and with it the money that facilitated exchanges. In peaceful times "money" is usually simply evidence of property. It is not property itself. When credit is shaken though, men are ill content with any money that is not property in itself; there arises a craving for "hard money," and men seek gold instead of paper. They try then to turn non-liquid resources, land or stocks or stores of commodities, into liquid resources, into the gold and silver to which people return in times of emergency. Paper bearing the guarantee of the Government might be accepted in lieu of the hard money, but little else. And apparently the paper was but reluctantly accepted in countries like France, where banking and the credit system were comparatively little developed. It was

deemed necessary in our own country to organise propaganda campaigns in order that people should not take the newly issued Treasury Notes to be exchanged for gold.

While affairs are tranquil there is a steady flow of funds from debtor to creditor; the banker debits one, in order to credit another customer.

Annihilation of Money. The credit system is dependent on this steady flow. Each business man is at once a debtor and a creditor; and he uses his credits to cancel his debits. The manufacturer draws on the warehouseman in order to pay for his raw material; the warehouseman draws on the retailer; the retailer himself may give credit, and wait till wages are paid in factory and workshop. Interruption anywhere in the stream means the upsetting of the credit system. The War very effectively interrupted the stream; London debtors were unable to pay their creditors, because their creditors in other countries were unable to pay. Brokers who had borrowed money from the banks in order to discount bills could not pay back their loans, though made on call; for the bills could not be met at maturity. The broker had probably deposited with the banker stock exchange securities as collateral; and in ordinary times, the banker would have sold the collateral, paid himself from the proceeds of the sale, and handed over such balance as remained to the defaulting broker. He could not do this in the August of 1914; for one of the extraordinary measures made necessary was the closing of the great stock exchanges of the world. This was done in the interest of both banker and broker. Banks are accustomed to count the value of the collateral they hold against loans at the closing price of the last session of the stock exchange. So long as the Exchanges did not open and reveal the great fall in the value of securities, the banks could and did refuse to admit that their assets were weakened. And the

brokers did not see their holdings sold at a loss. If the Exchanges had opened it would have been patent that the margin on which loans had been made had been wiped out; and some disguise of this fact was thought desirable.

The credit system had ceased to work for a while; and two other emergency devices were employed to hide the fact that, because their assets had frozen and were no longer liquid, men were unable to meet their engagements. A moratorium was decreed. In our own country and in France no attempt was made to conceal it. In America itself measures were taken to protect debtors from pressure by their creditors. The settlement of debts was delayed until measures were taken to set the stream of credit again flowing. There was also among us help from the Bank of England which, by its admirable conduct throughout the War, universally increased its prestige, and became more and more recognised as bound up with the stability of Britain itself. The Bank rediscounted to an enormous amount bills held by the joint stock banks and the bill-brokers, issued its notes freely on sound security and in excess of the legal minimum, and acted as agent for the issue of the emergency currency and for the raising of loans.

Our credit system gives us wonderful advantages: we could not as an industrial and trading community exist without it. But the strange and exciting events when war broke out show its dangers. The system works so long as people believe that the paper promises they have will be honoured; when fear arises that the paper will not, as the tangible gold always will, command commodities, then the system tends to break down. Stock Exchange securities—evidences of part ownership, that is—felt the first brunt of the War. Even in July, when the war clouds were gathering, prices

Dangers of
Credit System.

dropped in a startling manner. In France especially the losses were enormous before the moratorium was decreed. When we ourselves actually declared war, frightened sellers tried to turn their securities into available money at whatever prices they could get, and unless the selling had been forcibly stopped the banks would have had to disclose their sorry plight. The phenomenon was world wide; for no commodity has so extended a market as a good stock exchange security. Selling in the world's stock markets was heavy and prices fell alarmingly. Vienna was the first to close its Exchange; far off Montreal and Toronto followed suit the next day; Berlin prohibited quotations next; Paris suspended sales; and on July 31st the London Stock Exchange was closed. New York was applied to by terrified sellers in all lands and the brokers had their hands full of selling orders "At the market" (at whatever price was ruling). It was certain that, if the New York Exchange opened, an unprecedented collapse was inevitable; and a few minutes before opening time, some four or five hours after the English Stock Exchange, the authorities announced that New York would not open.

In our own banking facilities we were not so ill served as were our French neighbours; nor did our Government adopt the panic measures apparently called for in France. True, we had a moratorium of a few days at the banks; but depositors were not unduly hampered. In France the banks, except the Banque de France, took full advantage of the moratorium; and depositors obtained funds to a limited extent only. Hence arose, on the Continent and possibly to some extent among us, a distrust of bank deposits, of anything except ready money. Hence came a hoarding of gold, of silver, even we are told of copper coins, while bank notes and other paper money were passed on.

Paper Money
versus "Hard
Money."

Men came back to the almost obsolete function of money, its function as a store of value; they preferred something instantly convertible into whatever they sought, not something that depended for its currency on the degree of credit attached to a bank. The Banque de France was, too, in spite of a vast reserve of gold, required to suspend redemption of its notes in cash; and *cours forcé* (legal tender) was given to its notes, to which no date of redemption was attached. We certainly prohibited free dealings in gold, but gold has always been available at the Bank for both its own notes and the Currency Notes issued by the Treasury. The hoarding of silver by the French is easy to understand. Silver has in France unlimited legal tender; it maintains its relative value to gold only through limitation of issue. And even before the War the gold coins did not enter into effective circulation: silver was synonymous with money. The Banque itself may at its option pay either in gold or in silver; and it uses the privilege at times to preserve its gold reserve, proffering silver and charging a small premium if gold is required instead. The fact that at ordinary times the value of the silver coins is below their value as bullion is, therefore, hardly realised. Besides, during the War, silver bullion had greatly appreciated in value. Legal currencies in quite small denominations were issued, having been prepared as a measure of precaution before the War; and with some slight friction they were accepted in exchanges. It was, in fact, curious how our own soldiers as they moved about from region to region rapidly became accustomed to the extraordinary varieties of currencies they encountered.

Apart from what may be regarded as quite unusual conditions, however, the machinery of credit works smoothly and effectively. It is indeed difficult to conceive of modern business apart from banking.

The main business of an English bank is not the reception of money and its safe keeping. It is not a competitor with the Post Office Savings Bank. This function—the acting as a Safe Deposit—was once important when, for example, Mr. Pepys deposited with his goldsmith £2,000 “to be called for when I please,” and when calling for it three months later he, to his agreeable surprise, found it increased to £2,023. Nor is the main business the lending of money. The goldsmiths indeed induced people to deposit money by offering interest; because they could lend again a great proportion of the deposit and so finance the business of the city. Our own great joint stock banks likewise encourage deposits; for, clearly, the more people are involved in the credit system, the more effective it becomes—much as a telephone exchange is more valuable the greater the number of people we may call up. Nowadays, however, the money transactions of a bank are comparatively small. What the bank does is to exchange its credit for its customer's credit. It places to its customer's account a *deposit balance* upon which cheques may be drawn; the customer promises to pay at a definite time, or hands to the banker some instrument by which the banker can pay himself, or gives up securities that the banker can, if need be, sell to cancel the debt. The bank's credit is money, is in ordinary times as effective in its purchasing power as gold itself is. The customer's credit has a limited range, the bank's a wide one. Usually there is something of value behind the created money; but there need not be; nor can the public discriminate between bank money backed by a deposit or issued against a good bill of exchange and money that is merely the undertaking of a bank to pay. (See Appendix VI., where this question is further discussed.)

We shall perhaps be enabled to form a clearer idea of this leading feature of our banking system—this creation of money—by contrasting what happens in France. There the banks are really in great measure savings banks. Their *depôts* are really surpluses placed in the custody of the bank—temporarily for safe keeping, ultimately for investment in such securities as the banks advise. Before the War, France stood to the outside world needing money much as our saving, agricultural districts stand to our great industrial and manufacturing districts. Bagehot describes the relation: “Lombard Street is a sort of standing broker between quiet saving districts of the country and the active employing districts. . . . There are whole districts in England which cannot and do not employ their own money. No purely agricultural county does so. The savings of a county with good land, but no manufactures and no trade, much exceed what can be safely lent in the county. The savings are first lodged in the local banks, are by them sent to London and are deposited with London bankers, or with the bill brokers. In either case the result is the same. The money thus sent up from the accumulating districts is employed in discounting the bills of the industrial districts. Deposits are made with the bankers and bill brokers in Lombard Street by the bankers of such counties as Somersetshire and Hampshire, and those bill brokers and bankers employ them in the discount of bills from Yorkshire and Lancashire. Lombard Street is thus a perpetual agent between the two great divisions of England,—between the rapidly growing districts, where almost any amount of money can be well and easily employed, and the stationary and the declining districts, where there is more money than can be used.” As the sequel of the War showed, France was ill-served by those

who advised her foreign investments; but substantially France stood in regard to Russia and Morocco and Brazil in some such relation as that described. With us the persons to whom credit is granted are active business men who depend upon bank accommodation to carry on their businesses. In France depositors have really saved a surplus, and look to the banks to direct them where to place that surplus.

And since the banks obtained large profits from marketing foreign securities, the advice was more frequently given to invest abroad than to support industrial enterprise at home. It would seem that the traditional view of banking investments in France is that securities backed by the taxing power, even of an inferior State, are far superior to any industrial securities. So it was that the banks, their depositors being easily guided and controlled, were able in 1904 to sell the 800 million francs Russian Issue, taking for themselves 10 per cent., and in the same year the 62½ million Moroccan Loan, from which they obtained 18½ per cent. Much was in like manner lent to Brazil and Bulgaria and Austria. Certainly, from these investments abroad a steadily growing stream of payments was coming to France, and the Banque de France was, with the inflowing gold, able to build up a great reserve. But it appeared, when troubles came, that the nourishing of industries on their own soil would have been better for the French. They have the notion, from which many among us are not free, that a moderate return on their capital assures them of its safety, and that a security with a high yield cannot but be insecure. If the yield be very low the investment must be safe. The Austrian and Russian bonds hardly bore this out; nor was Brazil, relying for its revenue on the one commodity—coffee, a steady resource

Investment
Abroad or at
Home ?

when foreign shipments came to a standstill. The British bankers do not presume to dictate to investors what direction their investments should take, nor do they, like the German bankers, themselves control industrial enterprises; they do, however, by the provision of money, enable investments to be made and industrial enterprises to flourish.

We are to note, however, that the money created is based upon real foundations. The banker when he grants a credit knows that he must, at the option of the receivers, meet his customer's cheques in legal money. His reserve of legal money—gold, or currency notes, or Bank of England notes—is always a factor limiting the issue of credits. The customer, too, must provide some real foundation for the deposit placed to his account: he is required to lodge with the banker stocks or shares or bills against goods sold; and, even if he gets a personal credit (an overdraft or a cash credit), he gets this because the bank manager is convinced of his soundness, or of the soundness of his friends who enter upon a guarantee. Looked at in one way our banking system is peculiarly delicate. One might expect that at the slightest shock it would be shattered. When we remember, however, that the money placed to the credit of a merchant or a manufacturer is not gold, and is only in the rarest instances regarded as gold, our fears diminish. Credits exchange for credits; and when a lack of confidence makes some credits shrink, others shrink, too. A merchant or a manufacturer obtains an advance, say of £8,000, from his bank. He gets this

- (i) Rarely, because the banker knows him to be a man of integrity, always ready and willing and able to meet his engagements;
- or (ii) because friends enter into bond for him, so

that the banker has them to call upon in the event of his debtor's failing to pay;

or (iii) by the deposit of securities.

The peculiarity is the nature of the advance. The bank lends its credit to him so that he can draw cheques up to £8,000. Some actual money—claims upon the community—there is behind the loan. The bank itself may have about £2,000 of its shareholders' money, or there may have been a real deposit of about £2,000. Having this smaller amount available the bank feels safe enough in lending the larger amount. It may place the smaller amount into the Bank of England (which keeps the reserves of the outer banks); the Bank of England takes the gold coin, or the paper instruments that are claims on gold, and holds it always available for the depositing bank. The Bank of England is not, however, scrupulous to keep £2,000 in gold intact ready for immediate issue; it employs the major part in its own banking operations. The gold kept against the advance of £8,000 is, therefore, a good deal less than £8,000: it is a percentage of a percentage.

The credits granted must, however, be related to real money. For they all constitute *claims on gold*; and, since the essence of a modern bank is its instant capacity to meet its engagements, the bank must be certain of having a sufficient supply of gold, or of what the law regards as equivalent to gold. The banker will always have an eye to his reserve. He will, for instance, when he takes a security in exchange for a credit deposit, look upon the security from the point of view of the ease and certainty with which it can be sold. Is it one that is certain to find an immediate buyer on the Stock Exchange? Then it is a good banking security. Is it a document entitling one to

The Bank's
Reserve.

the ownership of houses and lands? Then, because there would be delay and difficulty in disposing of the title, it is not so good for the banker.

The reserve, you note, is not necessarily gold; it must, however, be some form of legal tender. The manner in which, during the War, the Government obtained credits—borrowed money—from the banks is a most interesting illustration of this statement. The Government itself was forced to create the basis on which it obtained loans. Treasury Notes were handed to the banks in exchange for a transfer from the banks' balances at the Bank of England: "Other Deposits" were diminished, the "Currency Note Account"—which came to be looked upon as a portion of "Public Deposits"—was augmented. Since the Government substituted their own securities in the Currency Note Account, the transaction came in the end to this: by making a number of notes the Government bought for its own use the banks' balances. The banks now, having this increased supply of legal tender, were able to "lend" the Government perhaps five times the amount of the Treasury Notes issued. The banks were, in effect, enabled and indeed desired to tax the public. The Government took the tax as a loan, pays interest on it, and will ultimately pay off the principal. For their services as unofficial tax-gatherers the banks were, therefore, amply rewarded.

CHAPTER XI.

BANKING INVESTMENTS: THE SHORT LOAN FUND.

A man may have much wealth, great holdings in business undertakings that some time hence will yield him a steady stream of profits, lands that being sold would yield many thousands of pounds, ships and cargoes at sea. Yet he may lack immediate purchasing power. Our banking facilities, in conjunction with the market afforded by the Stock Exchange, provide him with this requisite. If the "Merchant of Venice" had enjoyed the benefits of our banks he need not have put his life in jeopardy; he could have had made a Bill of Lading of one of his rich freights, and on the strength of that title to property have obtained from some banker on the Rialto an advance. The banker turns solid wealth into liquid purchasing power, fixed capital into circulating; he unlocks the capital that has been invested in enterprises that give but a tardy return, though maybe a great one. In one of his functions he is, if you like, a kind of glorified pawnbroker, who has succeeded in divesting his occupation of all sordid details. The pawnbroker takes into his possession, as security for the loans he makes, the property itself of his customers, their gold watches or their Sunday clothes. The banker takes into his possession not the land or the

factories or the railways, but the paper evidences of ownership. In default of payment of the loan the pawnbroker sells the pledged article; so, too, does the banker sell the collateral security. If I have £1,000 in Consols of which the price quoted is £50 my banker will, on my depositing with him the scrip, lend me £400. He considers that, in a stock, so little subject to violent fluctuations as Consols, he is perfectly safe with his twenty per cent. margin. Should the price decline, say to £45, he may ask me to deposit further security or to pay my debt; and if I am unluckily unable to do either he may, cold-bloodedly and without compunction, sell on the Stock Exchange, paying himself and crediting me with any balance. Much banking credit is lent on collateral security; and this is possible only because there is a free and wide market for securities. There is, in fact, the closest possible connection between the Stock Exchange and the banks; and between the interest payments by the banks and the yield on securities. If the Bank rate goes down, the price of securities tends to go up. For the long term investment rather than the short loan will attract the money available.

	Consider, for instance, how the yield on Consols is connected with the rate of discount. The yield
Long Period	on Consols is dependent upon the price,
Rate and	falling as the price rises, rising as it falls:
Short Period	with $2\frac{1}{2}$ per cent. Consols at 50 the yield on
Rate.	an investment of £100 is 5, at 60 the yield

is $4\frac{1}{8}$. This yield fluctuates within very narrow limits over a long period; for people as a rule buy Consols as a permanent investment, not as a speculation in hope of rising prices. The rate of discount is, however, a result of the "money" in the market—a supply that may augment or diminish at a moment, compared with the anxiety to turn future claims into present purchasing

power—a demand dependent upon the flourishing or stagnation of enterprise. The yield on Consols is a steady, "long-period" rate of interest on money; the rate of discount is a violently fluctuating, "short-period," rate of interest on money. Thus, during the last half of the nineteenth century, the yield on Consols hardly deviated from 3 per cent. During the same period Bank of England advances, made on the best security to borrowers of the highest financial standing, ranged between 10 and 2 per cent. There is a close and obvious connection between the return from investments (typified by Consols) and the market rate of interest on money (typified by the rate at which bills are discounted). Should there appear a likelihood of the discount rate's remaining low, the banks increase their holdings of first-class securities; these yield a greater return, and are not materially more difficult to realise than the automatically maturing bills. Prices of securities therefore rise: thus in 1896 the Bank of England rate remained over a long period at 2 per cent.; money flowed towards securities, and Consols reached a record price. Conversely, a rise in the rate of discount, by diminishing bankers' investments, lowers the price of Consols and other securities. The common idea, that the price of Consols is dependent upon the credit and stability of the State, is usually an error. Consols may in fact rise because, enterprise being checked by a sense of insecurity and the eager demand for discounts being thereby abated, the money available flows towards securities. This happened to an exceptional degree in the Spring of 1922. The Bank Rate—the barometer of the money market—went down. That is to say, money on short loan obtained little return. Trade and industry were going through a severe depression, so that people were reluctant to invest. As a result there was a boom in gilt-edged securities, in Government stocks

especially ; and Consols which had long languished below 50 speedily rose to 58.

Examine the process a little. The largest use of credit is obtained through the discounting of commercial paper. This represents a promise, by an individual or a firm, to pay on a certain date; and the theory is that the advance of the bank on this paper is a temporary one, and for a purpose temporary in nature. And as a rule the bank will purchase its commercial paper in such a manner that there is a constant stream of maturities falling in. The credit is put to work again immediately it is available; but the principle of British banking is that the credit shall return to its source at frequent intervals. Possibly two-thirds of banking credit works for the business world as its capital in this way. Most of the remainder is lent upon security, and the bank not only has the customer's promise to pay but other—collateral—security as well. Moreover, since the bank does not advance to the borrower the full market value of his collateral, it still further secures itself. The borrower deposits securities to the extent of at least twenty per cent. over the amount of the loan; and he is required to keep up this margin during the life of the loan. In case of need the banker wishes to be certain of realising his loan even by sale of the security. And the question that matters most to the banker is, "In case of need can I sell this security easily and speedily?" Without a ready market for the titles of property they possess, business men would not have at their disposal this bank credit. A good Stock Exchange market is indispensable if in this manner the banker turns locked up capital into readily available purchasing power.

By means of the Stock Exchange unsaleable individual

Prospective
Property
becomes
Present
Purchasing
Power.

part-ownership (a ten-thousandth share in a railway, perhaps) is transformed into a stock or a bond having a wide market. So readily can it be sold that it is almost money itself, and being pledged it obtains an immediate supply. The Stock Exchange mobilises the wealth* of a nation; the banks put the wealth into effective movement. An interesting example of this occurred on an immense scale during the earlier stages of the Great War. Before 1914 a vast amount of American securities were held in England and France; or, in other words, residents in Europe were part owners of American railways and canals and factories and mines. The Governments of Great Britain and France obtained the securities, obliged their holders to sell at rates fixed by the Treasury, and pledged these securities in New York in order to obtain loans for carrying on the War.

In ordinary times the Stock Exchange serves as the connecting link between investments for a long term and loans for a short period. It provides a ready market for shares in property that, in itself, would be saleable only at a ruinous loss. It provides also, what to a business man is even more useful, a measure of his wealth; the Stock Exchange quotations tell him what immediate purchasing power he can obtain from his banker, even though he should wish to retain his shares. Men are content, therefore, to keep their wealth in non-liquid forms, to invest in land, to embark upon undertakings that will take long to mature. Even the production of goods in general use begins far ahead of current needs: the publisher gets under way and incurs expenses in connection with his Christmas number before the Midsummer holidays. But his expectations have a present value. The long time investments with high yield and slight liquidity are, through the banks,

Long and
Short Loans.

turned into liquid assets. And if the capital invested yields the ten per cent. anticipated while the loan is obtained at five per cent. the banker's profit clearly is not the customer's loss. The customer is enabled to enjoy the advantages of fixed capital with its high yield, and of floating capital with its present service.

Our banks do not themselves finance industrial and commercial undertakings; and the great difficulties at the end of 1921 of the Italian Discount Bank, through the unproductivity of some of its many adventures, suggests that there is sound sense in the confinement to short loans. The banks do, however, lend largely to those who finance new undertakings; and the question is at times raised whether the banks could not themselves finance industry and trade. The Board of Trade in 1916 appointed a Committee to discuss whether it would be thus advisable for the banks to grant *financial facilities* (advances with a long currency), as distinct from *banking facilities* (advances by discounts on short date bills, or on collateral security at call). It was urged that when a sudden chance for expansion came to a business,—the offer of a big contract from abroad, for example,—our manufacturers were handicapped because they were obliged to raise fresh capital by making a new issue of shares or debentures, a process involving time. If, however, the banks could be persuaded to abandon their traditional attitude of insuring that their advances were constantly returning, this drawback would not exist. There would, too, it is asserted, be fewer unsound schemes, floated merely to obtain the public's money. Contrasting with our system that of the German banks, one writer points out: "The English banks have abstained in a *direct* way from flotation, as well as from Bourse speculation. But this very

English Banks
concentrate on
Short Loans.

fact causes another great evil, namely, that the banks have never shown any interest in the newly founded companies or in the securities issued by these companies, while it is a distinct advantage of the German system that the German banks, even if only in the interest of their own issue credit, have been keeping a continuous watch over the development of the companies which they founded." The German banks will finance a manufacturing industry, will have one of its officials on its board of directors, will buy its securities and hold them as regular investments. Our banks are reluctant to invest in securities other than what are—like Consols and other Government securities—always readily saleable. It was also asserted that British traders were handicapped in foreign markets like China, where buyers looked for long credits. The Committee reported that little ground existed for such complaints. But it suggested, as affording what is perhaps a more readily available resource, an institution able to afford help to British industries to a greater extent than the other banks can. In accordance with the suggestion the *British Trade Corporation* obtained a charter in 1917.

The contemplated activities of this new bank can be deduced from the report itself. It explains incidentally, too, some important features in our system as compared with that of other countries. "It is desirable," reported the Committee, "to state clearly our definitions of banking facilities in the British sense, and of what we would call by the wider name of financial facilities. The former are properly limited to those which can be provided without a 'lock-up' such as would impair the liquidity of funds and deposits at call and short notice. For this reason the usual practice of bankers here is to confine their advances as a rule to a currency not exceeding a few

months. By financial facilities we mean those which would involve a longer currency." The latter facilities were the ones upon which reasoned suggestions were sought from the Committee: we study below the conclusions reached.

There is a comparatively small supply of gold in the vaults of the Bank of England. Anyone "Money" is usually a Right to Gold. possessed of a Bank of England Note or of a Currency Note, or any one of the Bank's customers whose credits are summed up in the "Other Deposits," has a right to call for a portion of this gold. True, this aggregate of rights far exceeds the amount of gold available to satisfy those rights; but then it is a small fraction of the rights that are exercised at one time. A man into whose possession a five pound note has come does not at once visit the Bank in order to test whether in reality five golden sovereigns may be had for it. A calculation made some time ago showed that £5 notes had an average "life" of 82 days; £10 of 66 days; and even £1,000 notes of nine days. Among the Bank's customers the outside banks are the chief contributors to "Other Deposits," and, therefore, the most important of those with rights to call for gold. And in time of stress these important customers are likely to increase their rights rather than to diminish them by calling for gold. The rights to draw gold are sought by the industrial and trading community in order to finance its undertakings; and the banks lend rights, to the extent perhaps, of five times the rights possessed by themselves. Having a right to draw from the Bank of England one million, a bank feels safe enough to lend rights to draw five million of gold. For, again, the lending bank knows that the rights will be exercised but rarely. Credit being developed, the right to draw gold purchases commodities, pays debts, discharges

all manner of obligations quite as effectually as gold itself does. The more confident men are that their rights will be acknowledged the less anxious are they to exercise the rights: it suffices that they are able to cancel their obligations simply by transferring their rights. So it is that though there is little gold in the country there is much purchasing power: everyone of the many claimants upon the gold has at his disposal a readily accepted "money."

The money that the banks deal in is not gold but rights to gold. The tradition of the British banks is, however, to keep these rights well under their control; they lend for a short currency only. If a manufacturer wants control of capital in order to build factories or to instal machinery, to "lock-up" capital that is, he appeals not to the banks but to the investing public. He issues a prospectus offering shares in his undertaking. The Limited Liability Company is a means of concentrating long term loans, as the banks provide the means of concentrating short term loans. The United States money market imitates us in this probably useful division of labour; Germany and Italy to a considerable extent combine the two functions. The *British Trade Corporation* is designed to provide for our traders and manufacturers the advantages of the latter plan of providing long term loans as well as short term loans. Lord Faringdon's Committee reported: "There exists at the present time in this country the machinery and facilities for the finance alike of home trade and of large overseas contracts, and for carrying through much of the business which has been done by foreign banks. The British banks, we believe, afford liberal accommodation to the home producer. British bankers are not shy in making advances on the strength of their customers' known ability and integrity, and the charges for accom-

Bankers'
Money.

modation are often lower than the corresponding charges in foreign countries. Similarly, the Colonial Banks and British-Foreign Banks and Banking Houses render immense assistance to British trade abroad; and certainly in the Far East and in many parts of South America British banking facilities do not fall short of those of any other nation. We find also that in the case of large contract operations British contractors with the assistance of Financial Houses have in the past been ready to provide large amounts of capital and to take considerable risks in connection with the operations which they have undertaken. Our arrangements, however, are faulty in our not co-ordinating many of the facilities mentioned. We recognise also that the British manufacturer may be frequently in want of finance of a kind which a British Joint Stock Bank could not prudently provide, whereas the German Banks in particular seem to have been able to afford special assistance at the inception of undertakings of the most varied description, and to have laid themselves out for stimulating their promotion and for carrying them through to a successful completion. We conclude, therefore, that there is ample room for an Institution which would be able to assist British interests in a manner not possible under existing conditions."

The Report admirably shows how help could be given:

Financing "The Institution might in certain cases,
Undertakings. after careful examination, agree to make
 advances for the extension of existing manu-
 facturing plant, or perhaps fix the amalgamation or co-
 ordination of certain works, so as to reduce the cost of
 production. It would assist these works to obtain orders
 abroad, and give them reasonable financial facilities for
 executing these orders. It could also take a leading part
 in the inception of transactions and assist in connection

with the machinery of overseas business. In the case of German manufacturers it frequently happens that on the Board of the manufacturing company there is a representative of a bank, and there seems little doubt that the German banks have exercised an amount of control over the manufacturing concerns in which they are interested which would not be possible, even if it were desirable, in the United Kingdom. A large number of our manufacturing undertakings are wealthy concerns and would not tolerate for one moment interference by bankers in their affairs, and indeed would probably resent any inquiry into the nature of their business arrangements. Such manufacturing concerns, however, do require assistance when they transact overseas business. Take as a single instance the case of a Midland manufacturer selling goods to Italy. The Italian buyer has been accustomed to long credit, and if long credit is refused the business will probably be impossible. The manufacturer sells goods for, say £50,000, and the payment of that price would leave him with a considerable margin of profit; but the offer of the Italian buyer to pay him the equivalent of £50,000 in lire at six or twelve months is not attractive. He would much rather accept a lower figure for a clean cash transaction in sterling, and it is in connection with such business as this that an Institution of the kind contemplated would be able to act as intermediary (taking part or the whole of the financial liability) with profit to itself and satisfaction to the manufacturer. Or take the case of a contractor with a foreign Government, payment being made as the work proceeds, and possibly in paper in a foreign currency. The contractor in such circumstance would willingly share his profit with an Institution which would be responsible for the finance of the securities receivable by him."

CHAPTER XII.

THE BANK OF ENGLAND: THE RESERVE AND THE BANK RATE.

The whole of our banking system is centred upon the Bank of England. We shall, therefore, do well to understand something of the work of this, the most famous bank in the world.

Founding of
the Bank.

In 1694, by Act of Parliament and letters patent authorised thereby, the subscribers and contributors to a Government loan of £1,200,000, their heirs, successors, and assigns, were constituted a body corporate and politic by the name of the Governor and Company of the Bank of England with perpetual succession and a common seal. The annual sum of £100,000, charged on the Government revenues, was appropriated to the benefit of such corporation, being 8 per cent. on the amount subscribed and £4,000 a year for management. The notes of the Bank of England were to be exempt from all stamp duty. An Act of Parliament incorporates the Bank of England. Yet, though it is not registered under the Companies Acts, it has like the other Joint Stock banks the privilege of limited liability.

Divested of its elaborate legal dress the account comes to this: the Government was in sore straits for money; in order to get money, the Government granted a charter to a company formed to make profit in the lately discovered way of lending paper promises to pay. There was then a

natural disinclination to lend, even to the Government, For there had recently occurred a gross breach of public faith. The goldsmiths had advanced money to the Government of Charles the Second; and they expected, as was the custom, to be repaid with interest as the taxes came in. About thirteen hundred thousand pounds had been in this way entrusted to the honour of the State; for then the King was the public tax-collector and the public paymaster. He paid his cook and his army from the one fund. On a sudden it was announced that it was not convenient to pay the principal, and that the lenders must content themselves with interest. The lenders were as a result unable to meet their own engagements; just as a business man would be now if suddenly told that his debtors could not pay. For he depends upon his debtors for his power to pay his creditors. Several great merchant houses broke; and the dismay and distress was great.

We may go to Macaulay for a vivid account of the formation of the Bank whereby the public became assured that henceforth the State would scrupulously observe what it had undertaken to do:—"Another million was wanted to bring the estimated revenue for the year 1694 up to a level with the estimated expenditure. The ingenious and enterprising Montague had a plan ready, a plan to which, except under the pressure of extreme pecuniary difficulties, he might not easily have induced the Commons to assent, but which, to his large and vigorous mind, appeared to have advantages, both commercial and political, more important than the immediate relief to the finances. He succeeded, not only in supplying the wants of the State for twelve months, but in creating a great institution, which, after the lapse of more than a century and a half, continues to flourish, and in which he lived to see the stronghold through all vicissitudes, of the Whig party, and the

bulwark, in dangerous times, of the Protestant succession.

In the reign of William, old men were still living who could remember the days when there was not a single banking house in the city of London. So late as the time of the Restoration every trader had his own strong box in his own house, and, when an acceptance was presented to him, told down the crowns and Caroluses on his own counter. But the increase of wealth had produced its natural effects, the sub-division of labour. Before the end of the reign of Charles the Second, a new mode of paying and receiving money had come into fashion among the merchants of the capital. A class of agents arose, whose office was to keep the cash of the commercial houses. This new branch of business naturally fell into the hands of the goldsmiths, who were accustomed to traffic largely in the precious metals, and who had vaults in which great masses of bullion could lie secure from fire and from robbers. It was at the shops of the goldsmiths of Lombard Street that all the payments in coin were made. Other traders gave and received nothing but paper.

This great change did not take place without much opposition and clamour. Old fashioned merchants complained bitterly that a class of men who, thirty years before, had confined themselves to their proper functions, and had made a fair profit by embossing silver bowls and chargers, by setting jewels for fine ladies, and by selling pistols and dollars to gentlemen setting out for the Continent, had become the treasurers, and were fast becoming the masters, of the whole city. These usurers, it was said, played at hazard with what had been earned by the industry and hoarded by the thrift of other men. If the dice turned up well, the knave who kept the cash became an alderman: if they turned up ill, the dupe who furnished the cash became a bankrupt. On the other side

the conveniences of the modern practice were set forth in animated language. The new system, it was said, saved both labour and money. Two clerks, seated in one counting house, did what, under the old system, must have been done by twenty clerks in twenty different establishments. A goldsmith's note might be transferred ten times in a morning; and thus a hundred guineas, locked in his safe close to the Exchange, did what would formerly have required a thousand guineas, dispersed through many tills, some on Ludgate Hill, some in Austin Friars, and some in Tower Street.

Gradually even those who had been loudest in murmuring against the innovation gave way and conformed to the prevailing usage.

The advantages of the modern system were felt every hour of every day in every part of London; and people were no more disposed to relinquish those advantages for fear of calamities which occurred at long intervals than to refrain from building houses for fear of fires, or from building ships for fear of hurricanes.

In the city the success of Montague's plan was complete. It was then at least as difficult to raise a million at 8 per cent. as it would now be to raise thirty millions at 4 per cent. It had been supposed that contributions would drop in very slowly; and a considerable time had therefore been allowed by the Act. This indulgence was not needed. So popular was the new investment that on the day on which the books were opened three hundred thousand pounds were subscribed: three hundred thousand more were subscribed during the next forty-eight hours; and, in ten days, to the delight of all the friends of the Government, it was announced that the list was full. The whole sum which the Corporation was bound to lend to the State was paid into the Exchequer before the first instalment was due. Somers gladly put the Great Seal

to a charter framed in conformity with the terms prescribed by Parliament; and the Bank of England commenced its operations in the house of the Company of Grocers. There, during many years, directors, secretaries and clerks might be seen labouring in different parts of one spacious hall. The persons employed by the Bank were originally only fifty-four. They are now nine hundred. The sum paid yearly in salaries amounted at first to only four thousand three hundred and fifty pounds. It now exceeds two hundred and ten thousand pounds. We may, therefore, fairly infer that the incomes of commercial clerks are, on an average, about three times as large in the reign of Victoria as they were in the reign of William the Third.

It soon appeared that Montague had, by skilfully availing himself of the financial difficulties of the country, rendered an inestimable service to his party. During several generations the Bank of England was emphatically a Whig body. It was Whig, not accidentally, but necessarily. It must have instantly stopped payment if it had ceased to receive the interest on the sum which it had advanced to the Government; and of that interest James would not have paid one farthing. Seventeen years after the passing of the Tonnage Bill, Addison, in one of his most ingenious and graceful little allegories, described the situation of the great Company through which the immense wealth of London was constantly circulating. He saw Public Credit on her throne in Grocers' Hall, the Great Charter over her head, the Act of Settlement full in her view. Her touch turned everything to gold. Behind her seat, bags filled with coin were piled up to the ceiling. On her right hand and on her left the floor was hidden by pyramids of guineas. On a sudden the door flies open. The Pretender rushes in, a sponge in one hand, in the other a sword which he shakes at the Act of Settlement. The

beautiful Queen sinks down fainting. The spell by which she has turned all things around her into treasure is broken. The money bags shrink like pricked bladders. The piles of gold are turned into bundles of rags or faggots of wooden tallies. The truth which this parable was meant to convey was constantly present to the minds of the rulers of the Bank. So closely was their interest bound up with the interest of the Government that the greater the public danger the more ready were they to come to the rescue. In old times, when the Treasury was empty, when the taxes came in slowly, and when the pay of the soldiers and sailors was in arrear, it had been necessary for the Chancellor of the Exchequer to go, hat in hand, up and down Cheapside and Cornhill, attended by the Lord Mayor and by the Aldermen, and to make up a sum by borrowing a hundred pounds from this hosier, and two hundred from that ironmonger. Those times were over. The Government, instead of laboriously scooping up supplies from, numerous petty sources, could now draw whatever it required from an immense reservoir, which all those petty sources kept constantly replenished. It is hardly too much to say that, during many years, the weight of the Bank, which was constantly in the scale of the Whigs, almost counterbalanced the weight of the Church, which was as constantly in the scale of the Tories."

This excursion into history may well be closed by a paragraph from Adam Smith: "The stability of the Bank of England is equal to that of the British government. All that it has advanced to the public must be lost before its creditors can sustain any loss. No other banking company in England can be established by act of parliament, or can consist of more than six members. It acts not only as an ordinary bank, but as a great engine of

A Quotation
from Adam
Smith.

state. It receives and pays the greater part of the annuities which are due to the creditors of the public, it circulates exchequer bills, and it advances to the Government the annual amount of the land and malt taxes, which are frequently not paid up till some years thereafter. It likewise discounts merchants' bills, and has, upon several different occasions, supported the credit of the principal houses, not only of England, but of Hamburg and Holland. Upon one occasion, in 1763, it is said to have advanced for this purpose, in one week, about £1,600,000, a great part of it in bullion. I do not, however, pretend to warrant either the greatness of the sum, or the shortness of the time. Upon other occasions, this great company has been reduced to the necessity of paying in sixpences."

The important fact regarding the Bank of England, from the Money Market point of view, is that it is the keeper of the one reserve upon which the credit system of Britain is based. This reserve is at no time large in comparison with the enormous amount of monetary transactions conducted through the banks. The turnover of money at the London Bankers' Clearing House during 1921 reached the inconceivable sum of £34,930,559,000. The year had been one of depression and this astonishing amount was actually a decrease of about ten per cent. on that of 1920. Trade slackness, lower prices, Stock Exchange stagnation, all had combined to put a stop to the long record of annual increases in the three clearings. A single week's clearings are over six times the amount of gold in reserve. Here, for instance, is the first return for 1922 :—

LONDON BANKERS' CLEARINGS.

The return of paid clearing for the week ended January 4th issued by the Bankers' Clearing House compares with that of a year ago as follows :—

Week ended Jan. 4th, 1922...		Corresponding week 1921.	Inc. + or dec. —
	£	£	£
Town	657,930,000	770,042,000	— 112,112,000
Metropolitan.....	29,368,000	38,740,000	— 9,372,000
Country	44,994,000	68,411,000	— 23,417,000
Total	732,292,000	877,193,000	— 144,901,000

On a single "record" day, Friday, December 31st, 1920, there was a total clearing of £229,396,000, pretty nearly twice the amount of gold. We need not wonder, therefore, why the Governors of the Bank of England are solicitous about their Reserve; nor why, upon any sign of its dangerous depletion, they take vigorous measures to replenish it. Though we work on a very small cash basis, some gold there must be.

No money payment is made in the Bankers' Clearing House itself. Any settlements "on general balance" are made by drafts on the Bank of England. Perhaps we should examine the process a little. Barclay's Bank finds at the beginning of the day that it has a large number of cheques to collect for its customers from Lloyds Bank. The cheques are totalled, parcelled up, and at the Clearing House handed to the representative of Lloyds Bank. There will also be with Barclay's a number of matured Bills of Exchange domiciled with Lloyds Bank—accepted, that is, and made payable at Lloyds. The total amount of the cheques and bills is Barclay's *inclearing* with Lloyds. But Lloyds will have cheques and bills payable by Barclay's. The amount of these will be Barclay's *out-clearing* with Lloyds. We may take it that the difference between the in-clearing and the out-clearing will in ordinary times be

small: there will be an amount of £x due from B. to L., or from L. to B., an amount that may well be less than a single cheque that has been cleared. Certainly it will be a great deal less than the total amounts cleared. Even if B. settled at once with L. there would be a great economy. The Clearing House goes further, however. For Barclay's have transactions with other banks than Lloyds; and if there is to-day a payment due to Lloyds there may also be a payment due from another of the clearing banks. And the credit may well cancel the debit. At all events, if accounts with all the clearing banks are made out, there will be little to pay or to receive—little, that is, in comparison with the vast amount of "money" that has changed hands.

Barclay's account with Lloyds may be represented thus:—

BARCLAY'S WITH LLOYDS.

Cheques and Bills to collect		Cheques and Bills to pay	
a	£	a	£
β	£	b	£
γ	£	c	£
Balance to receive	£x		
	<u>£l</u> -		<u>£t</u>

The £x that makes the balance even is not paid by Lloyds to Barclay's: it is taken to form an item in a **general balance**. The item, affecting the general balance, is paid through the Bank of England. Each clearing bank has its account; there is a separate account for the **Clearing Bankers**; transfers among these accounts settle the whole matter. Instead of drafts for or on fifteen other banks, one draft for or on the Clearing Banker's Account is called for from each bank. If as a result of three clearings Barclay's have £1,000 to receive it requests the Bank of England—which is also a member of the Clearing

House—to transfer £1,000 from the Clearing Bankers' Account to the credit of Barclay's. This request, being signed by a representative of Barclay's and by an inspector of the Clearing House, is complied with; and the one result of the day's work is that "Other Deposits" in the Bank of England have been redistributed. Barclay's account has been augmented by £1,000, the Clearing Bankers' Account diminished by £1,000. This latter account will to be sure have also been augmented by £1,000 so that at the end of the day there will be no outstanding balance of the Clearing Bankers'; for what one bank has to receive another has to pay. Lloyds may, for example, after the balancing owe £500 on general balance. It then gives an authority to the Bank of England to transfer £500 from Lloyds Account to the Clearing Bankers' Account. Again "Other Deposits" are so far redistributed that Lloyds Account is depleted by £500, the Clearing Bankers' Account is replenished by £500. Barclay's general balance may be represented thus:—

BARCLAY'S BANK.

	<i>Balances for.</i>	<i>Balances against.</i>
Capital and Counties Bank ...	—	£y
Countts & Co.	—	£z
Glyn, Mills, Currie and Company	£w	—
Lloyds Bank	£p	—
National Provincial and Union		
Bank of England	—	£x
Balance due to Barclay's ...	£1000	—
	<u>£T</u>	<u>£T</u>

The Bank of England, we should note, assumes a privileged position at the Clearing House. It presents these bills and cheques due to itself from the other banks; it requires the other banks to collect direct from the Bank of

England. There will always, therefore, on the day's diary be an item in favour of the Bank of England.

The principle of the Bankers' Clearing House—the compensating, so far as possible of debits by credits—is in operation wherever big business is being done. The Railways, for instance, settle accounts through the Railway Clearing House.

All banking operations—we might without much exaggeration say all monetary operations—are based upon the Bank of England. In practically all domestic transactions payment from one banker is simply payment to another; and ultimately all that happens is a reshuffling of "Other Deposits." This part of the liability of the Bank of England should, at first sight, appear therefore as giving rise to no anxiety. It should be singularly stable. More than this, it would seem that in times of anxiety, in times when the outer banks are trying to make their positions more secure, these "Other Deposits" would actually augment. Little risk seems to attach to a deposit that tends to increase when times of pressure come. That the Clearing House system does entail a great responsibility on the Bank of England—the keeper of the one reserve—is, however, quite certain. No one could put the matter more lucidly and effectively than does Bagehot in his *Lombard Street*. Banks are able to keep their deposits at the Bank of England by the aid of the Clearing House system; and if panic were to rise to any considerable height, that system, resting as it does on confidence, would be destroyed by terror. "The common course of banking is this: *AB* having to receive £50,000 from *CD* takes *CD*'s cheque on a banker crossed, as it is called, and, therefore, only payable to another banker. He pays that cheque to his own credit with his own banker, who presents it to the banker

The Clearing House and the Bank of England.

on whom it is drawn, and if good it is an item between them in the general clearing or settlement of the afternoon. But this is evidently a very refined machinery, which a panic will be apt to destroy. At the first stage *AB* may say to his debtor *CD*, 'I cannot take your cheque, I must have bank notes.' If it is a debt on securities, he will be very apt to say this. The usual practice—credit being good—is for the creditor to take the debtor's cheque, and to give up the securities. But if the 'securities' really secure him in a time of difficulty, he will not like to give them up and take a bit of paper—a mere cheque, which may be paid or not paid. He will say to his debtor, 'I can only give you your securities if you will give me bank notes.' And if he does say so, the debtor must go to his bank and draw out the £50,000 if he has it. But if this is done on a large scale, the bank's 'cash in house' would soon be gone; as the Clearing House was gradually superseded it would have to trench on its deposit at the Bank of England; and then the bankers would have to pay so much over the counter that they would be unable to keep much money at the bank, even if they wished. They would soon be obliged to draw out every shilling.

The diminished use of the Clearing House, in consequence of the panic, would intensify that panic. By far the greater part of the bargains of the country in moneyed securities is settled on the Stock Exchange twice a month, and the number of securities then given up for mere cheques, and the number of cheques then passing at the Clearing House, are enormous. If that system were to collapse, the number of failures would be incalculable, and each failure would add to the discredit that caused the collapse.

The non-banking customers of the Bank of England would be discredited as well as the other people; their

cheques would not be taken any more than those of others; they would have to draw out bank notes, and the Bank reserve would not be enough for a tithe of such payments.

The matter would come shortly to this; a great number of brokers and dealers are under obligations to pay immense sums, and in common times they obtain these sums by the transfer of certain securities. If, as we have said just now, No. 1 has borrowed £50,000 of No. 2 on Exchequer bills, he for the most part cannot pay No. 2 till he has sold or pledged those bills to someone else. But till he has the bills he cannot pledge or sell them; and if No. 2 will not give them up till he gets his money, No. 1 will be ruined, because he cannot pay it. And if No. 2 has No. 3 to pay, as is very likely, he may be ruined because of No. 1's default, and No. 4 on account of No. 3's default, and so on without end. On settling day, without the Clearing House, there would be a mass of failures, and a bundle of securities. The effect of these failures would be a general run on all bankers, and on the Bank of England in particular."

THE RESERVE AND THE DISCOUNT RATE.

A bank note is a promise to pay gold, a cheque a command to pay gold. For every credit instrument gold may be demanded. There must be, therefore, at the base of our credit structure some reserve of gold—not necessarily for emission but as a guarantee of good faith. There must be some link between paper and metal; otherwise there is nothing to justify the assumption of a parity between paper and gold. The reserve with us, the only considerable store of gold in the country, is that held by the Bank of England. And the link is the possibility of

getting gold for export or for use¹ in the arts from the Bank of England. So long as people are certain that such a link will not be severed, they are quite content. They take paper substitutes for gold in full confidence; the reserve being there they do not call for it. •

How great the reserve of gold shall be depends on many circumstances, on the strength of the faith of the business world, on the degree of habitude in the use of credit instruments, on the efficiency of the machinery for enabling credits to compensate debits. Perhaps as important as any of these circumstances is the degree of ease with which the reserve may be made available. That banking system is best (i) which provides for the monetary needs of the community at moderate rates; (ii) which makes the maximum use of credit and a minimum use of cash; (iii) which operates as a check upon dangerous expansion of speculation; (iv) which minimises all violent convulsions. How does our system stand in regard to these matters? We certainly conduct our business upon a very slight cash basis. In the autumn of 1920 the gold held by the Bank of England was 123 million pounds; yet on the last day in that year (Friday, December 31st—the “record” day) chèques to the extent of £229,396,000 were cleared through the London Bankers’ Clearing House. Compare our relatively small amount of gold with the 410 million pounds in the United States Federal Reserve

¹ It should perhaps be noted that the possibility of obtaining full weight sovereigns for jewellers’ work is for a while in abeyance. By the Defence of the Realm Regulations it is decreed that “A person shall not melt down, break up or use otherwise than as currency any gold coin which is for the time being current in the United Kingdom”; and appropriate penalties are established for any contravention of the Regulation. Before a premium on gold had developed, the recognised way of obtaining 22-carat gold by manufacturing jewellers was the melting of gold coins.

Banks (the amounts cleared in New York being about 10 per cent. greater than in London), and with the 224 millions held by the Bank of France (the clearings being far smaller in amount in Paris).

A vigorous American writer has some illuminating remarks on this point. During the early months of the War gold had flowed into the States from every direction; yet the Federal Reserve Board had restricted gold shipments: "Had the United States maintained the record of paying gold to all legitimate creditors without question throughout the War, had New York remained the one free gold market in the world, New York would have needed in the future to carry much less gold in reserve than she will need for years to come. The institution or the community that maintains the reputation of honouring its obligations at all times is rarely called upon to honour them unnecessarily. London, with vastly less in the way of gold resources than the United States have had, preserves her reputation in this matter far better than we. Having gold she paid it out. London has probably a small amount of gold at the present time. The Bank of England's gold reserves, as shown in published figures, are larger than before the War; but to a very considerable extent the actual reserves are in South Africa or in Canada in depositories established by the Bank of England. But by the courageous use of such gold as she has had, London has preserved her credit to an astounding degree. . . . The argument has been presented that by retaining \$3,000,000,000 of gold we will be placed in a position of such great strength that we can finance the world, displacing London as the international centre. It is not improbable that London bankers who have seen this statement have smiled quietly. They do not need \$3,000,000,000 to finance the trade of the

world. Before the War, Great Britain financed the trade of the world with half a million dollars in gold and with much less than that in the actual reserves of her banks."

"Reserve of her Bank," he might have written. For our one reserve consists of the gold coin and notes held by the Banking Department of the Bank of England, the notes of course being exchangeable for gold at the Issue Department. No other bank keeps any appreciable amount of gold. We look, for instance, at the half-yearly (January, 1922) balance sheet of one of the big banks: the National Provincial and Union Bank of England will do. We find that its liabilities, the claims possible upon it for gold amount to almost 230 millions. Against this was an immediately available asset of a little over 36 millions described as "Coin, Bank of England and Currency Notes in the United Kingdom, and Balances with the Bank of England." The total amount of gold in the country before the War was about £38,500,000 in the Bank of England, and about £123,000,000 in the banks (doing work as till-money rather than reserves) and in the pockets of the people. Now that actual circulation has ceased and the gold has been concentrated in the central institution less should be needed. For it would be more readily available. The figure £150,000,000 is suggested as the minimum amount to be maintained as the banking reserve. This seems astonishingly small when one considers the amount of possible claims upon it, claims not limited to England but world-wide. As we have seen, though, these claims are for the greater part off-set by counter-claims and never reach the gold reserve.

But how is this reserve to be maintained? How, when it has been depleted by meeting all valid claims upon it, is it to be replenished? Before the War the manipulation

of the Bank rate of discount provided an efficient machinery for the purpose; and when again we are really on a gold basis the same machinery should be as effective. When more must be paid to this country than by it—when the exchanges are favourable, that is—gold flows freely to London from abroad; and the developing trade is accompanied by an increase of legal tender money. If, on the contrary, credits abroad were wanted so much that bills entitling to payment abroad rose to a high premium it became profitable to export gold. The exporter, the banker, who had given drafts and needed to cover them by sending actual gold, or the bill-broker who could make less by selling bills than by obtaining the gold and having it placed to his credit abroad, obtained the gold from the Bank of England. It was paid for by cheque and so reduced the Bank's liabilities as well as its gold. But since the liabilities are much greater than the gold, the ratio of reserve to liabilities fell. If this fall was considered dangerous the Bank raised its rate of discount; and the market rate kept closely to the official Bank rate. The raising of the Bank rate checked the outflow of gold, and even reversed the stream. Money was retained here that otherwise would have been sent for employment abroad; and remittances from abroad were attracted to take advantage of the higher rate prevailing here. Capital flows with the utmost ease to where it can obtain the more favourable terms; and the raising of the rate gave the required incentive to investment here—either in a Stock Exchange security or on short loan.

Each Thursday the Bank of England is required by the Act of 1844 to issue a Balance Sheet. This Bank Return, the Weekly Account, is like the Bank itself, divided into two parts. That of the Issue Department is simple :—

The Bank
Return.

ISSUE DEPARTMENT.

<i>Liabilities.</i>		<i>Assets.</i>	
	£		£
Notes issued ...	18,450,000	Government debt & other Securities }	18,450,000
	+ α	Coin and bullion	α

The £18,450,000 is the fiduciary issue, the faith money that is unbacked by gold. It includes the original debt owed to the Bank by the Government. The book debt of the Government to the Bank amounts to £11,015,100. The rest of the £18,450,000 probably consists of British Government (Stock Exchange) Securities. Every note beyond this fiduciary issue is a gold certificate; for it there is either coin or bullion (standard gold an ounce of which is taken as $3\frac{1}{16}$ sovereigns) in the custody of the Bank. It was originally contemplated that silver as well as gold coin would figure on the Assets side. But the item "silver bullion" has long ago dropped out; and it is very unlikely that any revival of the term will occur in the Account.

The Weekly Account of the Banking Department, the real Bank of England, is more complex:—

BANKING DEPARTMENT.

<i>Liabilities.</i>		<i>Assets.</i>	
	£		£
Proprietors' Capital	14,553,000	Government Securities ... }	s_1
Rest ...	r	Other Securities ...	s_2
Public Deposits ...	d_1	Notes ...	n
Other Deposits ...	d_2	Coin ...	c
Seven-day and other bills ... }	b		
	x		x

The **Proprietors' Capital** has remained unchanged for nearly a hundred years. The Bank need have no anxiety regarding this. We ought to note, perhaps, that its

amount—as compared with that of the other joint stock banks—is very large. The **Rest** (r) is a fluctuating amount largely of undistributed profits. No inconvenient request for this either may be anticipated. The other three items on the Liabilities side—Public Deposits, Other Deposits, and Bills—constitute the claims on gold that the Bank must, at any moment during banking hours, be prepared to meet. The **Public Deposits** are the payments into the Bank on behalf of the State. These deposits swell when income tax payments are pouring into the Bank at the beginning of each half-year. They dwindle as the Government makes its payments, interest on debts incurred, payments in regard to supply services, to contractors, and so on. The **Other Deposits** are those of the customers of the Bank, the most interesting of which customers are the “outer banks,” the big joint-stock and other clearing banks, which keep a balance at the Bank of England. It is upon this balance that the clearing bank draws when, at the end of the day’s clearing, a payment is due to the Clearing House Bank; it is this balance that is increased when, at the end of the day’s clearing, payment is due from the Clearing House Bank. The **Seven-day Bills** supply an interesting illustration of the work of a bank in transmitting money from one place to another at a distance. They are practically drafts (Bills of Exchange) drawn by the Bank upon itself. On the Assets side the **Government Securities** comprise claims of all kinds upon the Government, claims like Government Stock, National War Bonds, Exchequer Bonds, and Treasury Bills. The **Other Securities** are not the same as **Other Securities** in the Issue Department. The item in the Banking Department are claims other than those upon the British Government. The “Other Securities” are claims represented by Stocks and Bonds (other than British

Government Stock and Bonds), Debentures, Shares, and claims in respect of Bills of Exchange and loans (other than loans to the Government). The Bills will invariably be the best commercial paper; and will probably include no foreign Bills (Bills accepted to be paid abroad). •

Of these Assets the only immediately available part is $n + c$, the **Notes and Coin** in the Banking Department. Even Stock Exchange securities take a little time to be turned into legal money; and at a time of panic there would be few buyers. The securities could be sold only at a grievous loss. The **Notes and Coin** in the Banking Department of the Bank of England is, therefore, the one reserve upon which our whole banking system is based. Every credit instrument—cheque or bill or note—is, in the last analysis, a claim upon this stock of gold, a stock small enough in truth yet the only considerable accumulation of gold in the country. It is this one reserve that the manipulation of the Bank rate decreases or increases, decreases when an uneconomical store of gold is lying idle, increases when that store appears too low for safety.

Consider how various operations may affect this Weekly Account. (i) Suppose that a customer, **The Reserve and its Changes.** Guy's Hospital say, or Barclay's Bank, makes a deposit of £ x in coin or bank notes. Then the **Reserve** (the Notes and Coin of the Banking Department) is increased by £ x ; and Other Deposits (on the Liabilities side) are also increased by £ x . How is the relation of Deposits to Reserve affected?

It has changed from $\frac{n + c}{d_1 + d_2}$ to $\frac{n + c + x}{d_1 + d_2 + x}$, obviously an increase, since Deposits are usually about three times Reserve. The Bank, therefore, will be less solicitous about its store of gold; and Bank Rate will have a tendency to fall. Money on short loan will be easier.

(ii) Suppose that a deposit is made of £ x by cheques upon the outer banks. The Bank debits its banker customers with £ x , and credits its private customers with £ x . Both operations take place within Other Deposits. These are differently distributed as a result; but the Weekly Account is not altered.

(iii) Suppose that a deposit is made of £ x in currency notes. These Government notes will be cancelled by the Bank on behalf of the Government; and the amount of the cancelled notes is deducted from Public Deposits. Thus Other Deposits are increased by £ x , Public Deposits are diminished by £ x . In neither (ii) nor (iii) will the ratio of Reserve to Deposits be changed.

Suppose now that deposits are made by the Collecting Departments of Government: (iv) in coin or bank notes. The Reserve is increased by £ x ; Public Deposits are also increased by £ x ; and, as in (i) the ratio of Reserve to Deposits is increased. (v) If cheques are paid in, Other Deposits diminish to the extent that Public Deposits increase. (vi) If currency notes are paid in, no alteration appears. The Public Deposits are increased by £ x , but the Government's paper currency account with the Bank of England (which account forms part of Public Deposits) is lessened by £ x .

Similarly, the withdrawal either by an individual customer or by a bank of £ x in gold or notes would lessen the ratio of Reserve to Deposits. The ratio would change

from $\frac{n + c}{d_1 + d_2}$ to $\frac{n + c - x}{d_1 + d_2 - x}$.

Think now what happens when the Bank buys bullion. It purchases, say, x ounces of standard gold bullion at £ y (£3 7s. 10d. perhaps) an ounce. The seller may take for his gold Bank of England notes for £ xy . The Banking Department hands over to the Issue Department the

purchased gold; and the Issue Department hands over $\text{£}xy$ in notes. The transaction will, therefore, have caused no change in the balance sheet of the Banking Department; what has happened is simply that $\text{£}xy$ notes have been given for gold and have been received for gold. •The Banking Department has been the intermediary by which the Issue Department has bought $\text{£}xy$ worth of gold. In the Issue Department balance sheet, however, *Notes issued* have been increased by $\text{£}xy$; and on the Assets side *Coin and bullion* has been increased by the like amount.

Suppose, what is more likely to happen, that the seller is paid by a cheque upon the Bank of England. This he pays into, say, Barclay's Bank. When this cheque has been cleared we shall have, as an effect, these alterations :

ISSUE DEPARTMENT.

Notes issued	+ $\text{£}xy$	Coin and Bullion	+ $\text{£}xy$
--------------	----------------	------------------	----------------

BANKING DEPARTMENT.

Other Deposits	+ $\text{£}xy$	Notes and Coin	+ $\text{£}xy$
----------------	----------------	----------------	----------------

That is to say, the ratio of Reserve to Deposits is increased.

The effect of other banking operations upon the ratio of Reserve to Deposits should now be readily grasped; and we may put them briefly.

(i) The Bank lends $\text{£}x$ to a person by crediting his account with $\text{£}x$; so that Other Deposits are increased by $\text{£}x$ and Other Securities are also increased by $\text{£}x$. The ratio of Reserve to Deposits is decreased from

$$\frac{n + c}{d_1 + d_2} \text{ to } \frac{n + c}{d_1 + d_2 + x}.$$

(ii) The Bank discounts an approved Bill of Exchange for $\text{£}x$. That is, it buys the Bill at or beyond the official

rate of discount. Again the ratio of Reserve to Deposits is decreased from

$$\frac{n + c}{d_1 + d_2} \text{ to } \frac{n + c}{d_1 + d_2 + x}.$$

(iii) The Bank buys Stock Exchange Securities to the value of $\mathcal{L}x$, paying for them by cheque. Either Government Securities or Other Securities (Assets) are increased by $\mathcal{L}x$; and Other Deposits (Liabilities) are also increased by $\mathcal{L}x$. The ratio of Reserve to Deposits is decreased from

$$\frac{n + c}{d_1 + d_2} \text{ to } \frac{n + c}{d_1 + d_2 + x}.$$

(iv) The Bank borrows $\mathcal{L}x$ from a clearing bank. It receives a cheque for $\mathcal{L}x$ upon the bank so that Other Deposits are decreased by $\mathcal{L}x$. And Other Securities would be also decreased by $\mathcal{L}x$; for a liability would be incurred to the clearing bank. The ratio of Reserve to Deposits is increased from

$$\frac{n + c}{d_1 + d_2} \text{ to } \frac{n + c}{d_1 + d_2 - x}.$$

(v) The Bank sells Securities for $\mathcal{L}x$, being paid by cheque. Either Government Securities or Other Securities are decreased by $\mathcal{L}x$ (Assets) and Other Deposits (Liabilities) are also decreased by $\mathcal{L}x$. The ratio of Reserve to Deposits is increased from

$$\frac{n + c}{d_1 + d_2} \text{ to } \frac{n + c}{d_1 + d_2 - x}.$$

The ratio of Reserve to Deposits is, therefore,

increased by the addition to deposits in coin or Bank notes,

by the purchase of bullion (when payment is made by cheque or by a credit deposit),

by borrowing against security,

by selling securities ;

decreased by withdrawal of coin or Bank notes,
by lending or discounting,
by buying Securities.

Page 196 gives a table showing for five successive weeks the pertinent items in the Weekly Account. "The "Reserve," you remember, consists of the Coin and Notes in the Banking Department; the Liability is the sum of "Public Deposits" and "Other Deposits."

The Bank of England is concerned about its Reserve:
the other banks are concerned that they
A Bank shall always have enough legal tender money
Balance Sheet. to meet all the legitimate demands upon
them.

When demands for legal money come upon him rapidly the banker is anxious to turn his Assets into immediately available means of payment, into coin or Bank of England Notes or Treasury Notes. That he is ultimately solvent is of less importance than that he can at the moment meet all legitimate claims upon him. How far he can do this he sees from his balance sheet. He looks to the possible claims, either immediate or at a very short date. He compares with these the immediately available money or that available without a great lapse of time. He arranges his assets in relation to the speed at which they may be turned into money, may become liquid.

The monthly statement recommended by Lord Cunliffe's Committee (1918) makes this principle prominent. Examine the account a little.

The last four items on the Liabilities side constitute claims upon the bank, claims that must be at need met—immediately or at very short notice—in legal tender currency. The **Capital** and **Reserve Fund** are also claims; but the bank need be under no anxiety regarding them. To meet these possible claims the bank has, in the

BANK OF ENGLAND RETURNS.

ISSUE DEPARTMENT.				BANKING DEPARTMENT.						
Date.	Notes Issued.	Gold Coin and Bullion.		Public Deposits.	Other Deposits.	Government Securities.	Other Securities.	Reserve.	Proportion of Reserve to Liability.	Bank Rate.
1921.	£	£		£	£	£	£	£		
July 6 ...	145,002,890	126,552,890		19,720,531	129,041,060	63,798,078	85,102,305	17,710,798	11.9	6
July 13 ...	145,004,240	126,554,240		19,664,910	134,964,309	76,003,078	77,612,637	18,808,096	12.2	6
July 20 ...	145,006,570	126,556,570		16,936,444	149,286,333	82,718,078	82,275,311	19,099,719	11.4	6
July 27 ...	145,008,020	126,558,020		15,373,851	106,435,907	43,188,078	78,000,845	18,536,693	15.2	5½
1920.										
July 28 ...	139,923,610	121,473,630		15,148,654	118,650,249	59,912,361	75,481,209	16,315,188	12.2	7

PROPOSED MONTHLY STATEMENT TO BE PUBLISHED BY BANKS

*Statement of the average figures of the weekly Balance Sheets
during the month of 19....*

LIABILITIES.	ASSETS.
Capital :—	Cash :—
Registered £	£
Subscribed £	(1) Coin, Bank and Cur- rency Notes, and Balances with the Bank of England £
Paid up... .. £	(2) Balances with Lon- don Clearing Agents and with other Banks, Ban- kers or Banking Companies in the United Kingdom £
Reserve Fund	(3) Items in transit £
Current, Deposit, and other	Money at Call and at Short
Accounts	Notico
Acceptances	British Bills of Exchange
Endorsements, Guarantees	Foreign Bills, Foreign Bank
and other obligations	Bills and Domiciled Bills
Notes in Circulation... ..	Balances abroad
	Investments :—
	(1) Securities of, or guaranteed by, British Government
	(2) Indian and Colonial Government Securities, British Corporation Stocks, British Rail- way Debenture and Preference Stocks
	(3) Other Investments
	Loans and Advances
	Other Assets
	Bank Premises
	Liabilities of Customers for Ac- ceptances, as per contra ..
	Liabilities of Customers for En- dorsements, Guarantees and other obligations, as per contra
£	£

first place, **Cash**. And you notice that the Balance with the Bank of England is looked upon, is in fact, equivalent to actual cash. For at a moment it can be converted into coin or Bank of England Notes. It matters not that the Balance is not kept intact as a store of gold at the Bank of England; for the Bank of England treats the deposit of a bank-customer as it does the deposit of another customer. It keeps immediately available only a fraction of the deposit; the bulk of the deposit is actively employed—facilitating trade and industry, and earning profit for the Bank. The fraction kept immediately available is greater with the Bank of England than with the outer banks. The Bank bears all the shocks of the money market; the outer banks merely transmit those shocks. The Bank's fraction may attain to one-third; the joint-stock banks, other than the Bank of England, are happy with one-fifth. **Money at Call and at Short Notice** is in the hands of active operators on the Stock Exchange, in Produce and other markets, and in the Discount Market. It is lent at low rates of interest on the stringent condition that it is repaid on demand or in a stipulated short time. In practice it is as readily available as the Cash in hand. It is available for the banker, yet he makes a profit by it. **British Bills of Exchange** are investments that give little trouble; a stream of constantly maturing Bills affords means of buying further Bills. The banker makes his profit by acting as intermediary between those that have Bills to meet and those that want to discount Bills. **Domiciled Bills** in the next item are accepted by persons resident abroad and payable in London. For these, as with the other Foreign Bills, there might in times of crisis be delay in transfer into gold. So with **Balances abroad**; difficulties and delay might arise in having these transferred to London. **Investments** are, you

note, arranged in reference to the security reputed to them.

Take for comparison an actual Balance Sheet, the half-yearly one of the London County Westminster and Parr's Bank, Limited, for instance. You will find that it conforms very closely with that suggested. A rough calculation, too, will show you that the ratio of Deposits to Reserve is about 20 per cent. The other big banks show a ratio that is substantially the same. The Balance Sheet of The National Provincial and Union Bank of England is interesting for the amount of detailed information it affords: you may perhaps care to look at it.

You will notice on the Liabilities side an item **Acceptances** balanced by a corresponding item on the Assets side, **Liabilities of Customers for Acceptances**. This is a steadily increasing item, and we should understand what it signifies. The Acceptances really imply a lending of the bank's name (and credit) in order to make a Bill payable by a trader into a first-class bill—one that will find a ready market, be a kind of international currency in any trading centre, and if necessary be discounted at the Bank of England. The customer on whose behalf the bank accepts the bill is, of course, under an obligation to provide funds for paying the bill when due; and in all but the rarest instances he does so provide. The acceptance by the bank merely undertakes that, if this most exceptional event should happen, the bank itself will pay from its own funds. In any event the bank, as acceptor, pays; and is reimbursed by the customer. It is again, you note, an exchanging of a wide credit for a narrow credit.

Consider the process a little; consider how it is that an exporter can ship wheat from a port on the West Coast of America to an unknown European market, and yet obtain

cash against shipment. A San Francisco shipper deals with a London wheat importer. A Bill on London—a “sterling bill” drawn on a London bank—is a medium of exchange throughout the world; and it is by this means that the San Francisco shipper will wish to be paid. The London merchant therefore arranges with his own banker to open a credit in favour of the San Francisco shipper. A letter of credit will be sent and this will give the shipper the right to draw a Bill upon a London bank; and the bank undertakes to accept a Bill, if accompanied by the documents confirming shipment and giving a title to the goods shipped. These documents will include the Bills of Lading and the Insurance Policy. With his letter of credit and the shipping documents the San Francisco shipper goes to his own banker; he hands over the documents, and gets immediate payment of the Bill (less discount). The Bill is sent with the documents to the London office of the San Francisco bank. It is accepted by the London bank, or possibly paid at once under rebate—the rebate being calculated in accordance with the time the Bill has yet to run at half per cent. above the current deposit rate of the London Joint Stock Banks; and the documents become available for the London wheat importer. Having these documents he is able to control the movements of the shipment; and he, most likely, sells it in Great Britain or elsewhere at a profit before the Bill (one for sixty days perhaps) is actually due. He cancels his obligation to his banker; the banker has so much less as a liability for Acceptance; his commission of about a quarter of one per cent. has been earned through exchanging the public credit enjoyed by him for the private credit enjoyed by the merchant. The turning of a gold bracelet into sovereigns would be analogous.

Cr.

PROFIT AND LOSS ACCOUNT.

Dr.	£	s.	d.	£	s.	d.
To Interim Dividend of 10 per cent. (£2,411,969) ...						
Tax) on £20 Shares paid in August last ...	494,969	6	0			
" Interim Dividend of 6½ per cent. (less Income Tax) on £1 Shares paid in August last ...	84,556	17	0			
" Bank Promises Account ...	250,000	0	0			
" Rebuilding Account ...	200,000	0	0			
" Contingent Fund ...	500,000	0	0			
" Further Dividend of 10 per cent. (less Income Tax) making 20 per cent. for the year on the £20 Shares (£5 paid up) ... £494,969						
" Further Dividend of 6½ per cent. (less Income Tax) making 12½ per cent. for the year on the £1 Shares ...	84,556	17	0			
" Balance carried forward ...	519,709	5	0			
	1,099,234	8	0			
				£2,628,760	11	0

WALTER LEAF,
M. C. TURNER,
R. HUGH TENNANT,

} Directors.

JOHN RAE, *Chief General Manager.*
J. E. JACKSON, *Chief Accountant.*

AUDITORS' REPORT.

We have examined the above Balance Sheet and compared it with the Books at Lothbury, Lombard Street and Bartholomew Lane, and with the Certified Returns received from the Branches.

We have verified the Cash in hand and Bills Discounted at Lothbury, Lombard Street and Bartholomew Lane, and the Cash at the Bank of England.

We have examined the Securities held against Money at Call and Short Notice, and have verified the Investments of the Bank. We have obtained all the information and explanations we have required, and in our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Company's affairs, according to the best of our information and the explanations given to us, and as shown by the Books of the Company.

TURQUAND, YOUNGS & CO.,
KEMP, CHATERIS, NICHOLS, SENDELL & CO., } *Chartered*
PRICE, WATERHOUSE & CO., } *Accountants.*
STEAD, TAYLOR & STEAD,

} Auditors.

LONDON, 20th January, 1922.

The summary table on page 204 shows effectively how small a proportion of Cash to Liabilities the banks manage on. The table shows, too, how very greatly the "big five" surpass the smaller banks.

A comparison of the Statement of a typical United States bank suggests, that the proportion of cash to deposits must be, in the United States, a greater one than with us. The item "Foreign Exchange" in the Assets is what we call "Foreign Bills Discountal"; it means, that is, that the amount is steadily falling due and being paid.

COLUMBIA TRUST COMPANY, NEW YORK.

MAIN OFFICE, 60 BROADWAY.

STATEMENT, DECEMBER 31, 1920.

ASSETS.

Cash on Hand	...	...	...	...	\$ 1,097,107.77
Cash in Banks and Exchanges	...	...	...	...	19,605,077.82
Foreign Exchange	...	...	...	...	2,179,391.38
U.S. Government Bonds and Notes	...	...	...	...	3,215,243.60
State and Municipal Bonds	...	...	...	...	1,950,927.24
Short Term Securities	...	...	...	...	4,026,139.86
Other Bonds and Stocks	...	...	...	...	9,951,667.10
Loans and Bills Purchased	...	...	...	...	56,994,348.87
N.Y. City Mortgages	...	...	...	...	4,490,649.86
Real Estate	..	...	...	...	3,946,372.51
Customers' Liability on Acceptances and					
Commercial Letters of Credit	...	...	...	...	11,436,233.67
Accrued Interest Receivable	...	.			386,138.30
					<hr/>
					\$119,279,297.98

LONDON CLEARING BANKS' MONTHLY STATEMENTS. WEEKLY AVERAGES FOR NOVEMBER, 1921.

[000's omitted.]

November, 1921.	Liver- pool and Man- chester.	Barclays.	Coutts and Co.	Glyn, Mills, Currie and Co.	Lloyds.	London Joint City and Midland.	London County West- minster and Par- sonage.	National Provin- cial and Union.	National.	Williams Deacon & Co.
ASSETS.										
Coin, Bank and Currency Notes and Balances with the Bank of England	8,307	37,461	1,414	2,064	32,179	55,506	31,872	29,241	4,019	4,813
Collection on other Banks in the United Kingdom	2,116	6,718	416	969	7,661	10,713	8,255	7,044	155	949
Items in Transit	—	—	—	—	—	—	—	—	—	—
Money at Call and Short Notice	8,791	17,674	3,243	7,722	12,730	11,470	17,677	13,107	8,532	3,311
Bills Discounted	9,954	35,032	2,574	620	94,117	73,879	99,880	59,007	3,492	5,496
Investments	11,090	55,859	4,654	6,010	75,679	51,648	54,842	45,206	14,900	5,784
Advances to Customers and other A/cs. Liabilities of Customers for Accep- tances, Endorsements, etc.	38,921	140,885	7,378	6,374	132,260	181,598	119,508	129,237	18,293	18,526
Bank Premises Account	5,086	6,202	224	1,185	9,702	17,836	14,129	2,926	530	1,400
Investments in Affiliated Banks	1,343	4,480	346	370	5,668	4,489	4,116	3,936	405	1,680
	—	8,236	—	—	7,642	3,268	2,691	2,240	—	—
	86,848	362,097	20,258	25,314	377,528	410,397	353,270	291,944	50,506	40,959
Ratio of Cash to Current, De- posit and other Accounts ... }	10.73	11.28	7.67	9.18	9.36	14.96	9.92	10.79	9.07	13.12
LIABILITIES.										
Capital Paid up	2,348	15,592	800	1,000	14,372	10,861	9,004	9,309	1,500	1,875
Reserve Fund	1,400	8,250	800	500	10,000	10,861	9,004	8,878	980	1,000
Current, Deposit and other Accounts	77,413	331,993	18,434	22,477	343,454	370,839	321,117	270,831	44,295	36,684
Acceptances, Endorsements, etc.	5,687	6,262	224	1,185	9,702	17,836	14,129	2,926	530	1,400
Notes in Circulation	—	—	—	—	—	—	17	—	3,201	—
Reduction of Bank Premises Account	—	—	—	152	—	—	—	—	—	—
	86,848	362,097	20,258	25,314	377,528	410,397	353,270	291,944	50,506	40,959

January, 1922.

LIABILITIES.

Capital Stock...	...	...	...	\$ 5,000,000.00
Surplus and Undivided Profits	...	...	...	7,608,223.65
Deposits	...	...	...	91,674,927.70
Mortgage on Real Estate	...	...	...	115,250.00
Reserve for Taxes	...	...	...	458,650.27
Bills Payable	...	...	...	2,000,000.00
Acceptances	...	...	...	10,158,514.97
Commercial Letters of Credit	...	...	...	1,277,718.70
Contingent Liability on Domestic and				
Foreign Bills Sold	...	...	...	920,393.71
Accrued Interest Payable	...	...	...	65,498.98
				<hr/>
				\$119,279,297.98

CHAPTER XIII.

REGULATION OF THE NOTE ISSUE.

A bank note is a promise to pay gold upon demand.

**Convertible
and
Inconvertible
Notes.**

When the promise is, without hesitation and without calling for any trouble, fulfilled, the note embodying the promise is a convertible one. When gold cannot be obtained for the note, or when it can be obtained only as a result of trouble and waiting, the note is inconvertible. Purporting to be a promise it becomes simply a paper right to a more or less indefinite purchasing power. No date of redemption is fixed for it; and in extreme cases, of which we recently have had many, it circulates only because of the Government's decree—only because the subjects of a state cannot but believe that what is still called a mark, or a crown, or a rouble, must have some relation to the coins that have vanished. The mass of people have not divested themselves of the old mercantile belief that there is an inherent value in money, and that the increase of money means of necessity the increase of well-being. Sentiment, however, cannot maintain the value of money when it is found that the power in exchange for real goods has well nigh dwindled to nothing.

When, through the severing of the link between gold and paper, the note is inconvertible, we have the drawback that the measure of value is an uncertain measure; for practical purposes, indeed, hardly deserves to be called a measure. Prices at home rise and fall in accordance with the notes

issued; and these notes are issued in accordance with the needs of the issuing authority, not in accordance with the requirements of trade. The great merit of a gold currency into which notes can at will be converted, is its simplicity; the great demerit of a system of paper, where the notes merely bear the names of sums of gold, is its uncertainty. Exchanges at home are hampered; exchanges abroad become mere barter. We ourselves suffered from this uncertainty. There was, during 1922, no stability in the exchanges; for the countries concerned were no longer under an effective gold system. The traders were no longer able, if called upon, to fulfil their obligations by handing over a definite weight of gold. Under a simple gold system all that a business man had to do when calculating what he had engaged to pay abroad, or what to receive, was to estimate weights of a commodity, of gold. His paper was potentially gold. Before the embargo on gold export, anyone with a five pound note could obtain for it a rigidly defined and unvarying weight of gold. And he could deal with it as he chose, could use it for filling teeth, or for making into watch cases, or for sending abroad to liquidate the obligations he had incurred. If he chose to send it to New York, he could at the Assay Office obtain a dollar bill for every 23·2 grains of fine gold. The material sovereign—not its paper representative—could without great expense be turned into dollars. As soon as the banks realised that a profit could be made by the conversion of sovereigns into dollars, the movement of gold began.

The business man was, for some years after the War, concerned not with a thing ascertainable and evident to the senses, not with the weight of an actual commodity, but with a thing intangible and immaterial. He looked to purchasing

An Unsatisfactory Solution.

power. Certainly, the dealers in statistics tried to make this also definite through their Index Numbers. But we are a dubious people, and Index Numbers do not inspire trust. A comparison between the number of plates of porridge a pound can buy in London and a franc in Paris is not convincing: plates of porridge are not all alike, and state officials may be inept manipulators of figures. We went back again, in fact, to the barbarous and wasteful system of barter, and without the advantage of a money measure.

When gold was at the back of every transaction—when a cheque was a command to pay gold, a bank note a promise to pay gold, a silver coin a token for gold,—things were simple; and trade flowed as in a spring flood. The hunger of business men the world over for a sound currency, based on gold, became the keener as that easy means of comparison receded. The comparison should have been: how much fine gold in this sovereign, how much in this napoleon? The comparison was, in fact, a more difficult one to establish: how many yards of calico can I buy in London with this Treasury note; how many yards in Paris with a paper franc; how many in Berlin with a thousand paper marks? Part of the bewilderment into which men were thrown arose, you notice, from the retention of the old names: people mumbled pound and franc and mark, and thought they were speaking of the old things. The rose by any other name would smell as sweet. The converse is not true, though: we should not better the smell of an onion by calling it a rose. It is the thing that matters; and the retention of the name gives no guarantee of the permanence of the thing. *London* to-day implies a very different thing from the *London* of Elizabeth—when the Corporation were constrained to appoint officials in order to impound pigs straying about the streets.

Our own "pound" has retained its name through many vicissitudes. "What is a pound?" would at various times have had various answers: pound weight of silver, a quarter of an ounce of gold with a little alloy, an ill-defined and fluctuating purchasing power attested by a Treasury Note, and now perhaps a well-defined and constant purchasing power attested by a claim upon gold in the Bank of England. These changes are slight, however, when compared with those we saw in the Austrian crown or the Russian rouble. Can any merchant, unless in the spirit of wild gambling, enter into an engagement of long date when things like this are possible? In June 1914 the *British Bank for Foreign Trade* lent the *Russian Commercial and Industrial Bank* 750,000 roubles, at that time worth about £78,000. In 1921 the borrowing bank wished to pay back, and tendered the requisite number of roubles. The lending bank brought an action to recover the sterling value in 1914. Judgment was, however, given against the claimant, and a loan of £78,000 was legally repaid by £5. The holder of a foreign Bill ought to be able to offer to the prospective buyer a claim to a fixed weight of gold in the foreign country; when paper was inconvertible what he did really offer was a title to an amount of paper currency for the redemption of which no date was set, no provision made.

During the period (1797-1819) when the Bank of England was prohibited from paying its "Bank Restriction." notes in gold, when for the only time in their history Bank of England notes were inconvertible, we ourselves suffered from the inconveniences of an excessive—and therefore depreciated—paper currency. It was not that the credit of the Bank was impaired; it was that the paper measure of value was unstable. The conclusion of the "Committee to consider the high price

of bullion" in 1810 (an ounce of standard gold being then about £4 10s. 0d. instead of £3 17s. 10½d. an ounce) is very like that reached by Lord Cunliffe's Committee of 1918. Here are three pregnant remarks of the earlier Committee. "So long as the suspension of cash payments is permitted to subsist, the price of gold bullion and the general course of exchange with foreign countries, taken for any considerable period of time form the best general criterion from which any inference can be drawn as to the sufficiency or excess of paper currency in circulation." "Your Committee are of opinion that no safe, certain, and constantly adequate provision against an excess of paper currency, either occasional or permanent, can be found, except in the convertibility of all such paper into specie." "Your Committee cannot but see reason to regret that the suspension of cash payments, which, in the most favourable light in which it can be viewed, was only a temporary measure, has been continued so long."

We are to distinguish, you notice, this "suspension of cash payments," whereby the bank note became inconvertible, from what is, not quite accurately, called the "Suspension of the Bank Act." The latter affects the convertibility not at all; it merely relieves the Bank, for a while, of the necessity to procure gold for every additional note issued. The drawbacks of an arbitrary currency have long been realised among us; and we are very unlikely ever again to suspend cash payments. Other peoples have been more reckless or less instructed. The following summary table, compiled by the Supreme Economic Council of the League of Nations, may not be very exhilarating. It does show to what an extraordinary length some of the continental peoples went in the creation of inconvertible paper: both the Imperial Bank of Germany and the Austro-Hungarian Bank, for example, appear to

have issued notes nominally worth more than all the gold in the hands of man. They began skidding down the hill, and there is no stopping until the bottom is reached—until the notes are repudiated and a return made to the solid gold basis.

NOTES IN CIRCULATION.

STATEMENT showing the fluctuations in the Note Circulation in all the principal countries—in £1,000's. Foreign currencies converted at approximately par rates.

End of.	United Kingdom.		United States.		Bank of France.
	Currency Notes.	Bank Notes.	Federal Reserve Notes.	Other Paper Currency.	
December 1913	—	29,608	—	536,407	228,542
1914	38,478	36,139	3,583	554,827	406,464
1915	103,125	35,309	42,444	595,046	532,394
1916	150,144	39,676	62,088	666,815	667,153
1917	212,782	46,591	255,676	547,149	893,472
1918	323,241	70,190	548,053	435,166	1,209,984
1919	356,152	(d) 87,350	622,847	374,123	1,490,982
August 1920	356,012	(d) 106,294	666,682	368,147	1,516,180

(d) Excluding Bank of England Notes held on Redemption Account in respect of Currency Notes. These figures, like those relating to Exchange quotations (page 241) speedily became greatly changed. Except for purposes of comparison neither these nor the later figures have reference to present conditions.

End of.	Italy.		Bank of Japan.	National Bank of Denmark.	Netherlands Banks.
	Treasury Notes.	Bank Notes. (a)			
December					
1913	19,963	91,340	43,669	8,420	26,058
1914	26,290	117,440	39,491	11,479	39,426
1915	43,284	158,723	44,053	12,247	46,451
1916	52,692	200,496	61,575	15,826	63,198
1917	69,952	337,000	85,146	18,770	74,189
1918	84,956	470,008	117,240	25,002	89,079
1919	90,808	651,252	159,268	27,186	86,061
August 1920	—	—	—	30,130	85,503

(a) Notes of the Bank of Italy, Bank of Naples, and Bank of Sicily.

End of.	Bank of Spain.	Bank of Sweden.	Bank of Norway.	National Bank of Greece.	National Bank of Roumania.
December					
1913	77,268	13,026	5,978	(a) 10,538	17,487
1914	78,944	16,892	7,455	(a) 11,245	23,130
1915	84,007	18,216	9,012	(a) 13,539	30,488
1916	94,403	23,195	13,970	(a) 18,558	58,068
1917	111,944	31,818	18,129	(f) 33,925	78,450
1918	133,371	45,196	24,234	(a) 43,790	99,566
1919	154,252	41,531	25,239	(a) 52,979	168,601
August 1920	157,992	38,527	25,918	—	—

End of.	National Bank of Belgium	Austro- Hungarian Bank.	Bank of Finland.	Bank of Portugal	Canada Chartered Banks.
December 1913	42,696	103,902	(a) 4,597	23,400	(a) 21,727
1914	64,570	214,042	(a) 4,725	21,703	(a) 20,378
1915	52,260	298,417	(a) 7,232	25,879	a) 20,479
1916	51,260	453,708	(a) 12,683	31,585	(a) 25,359
1917	50,720	767,917	(a) 23,354	43,455	(a) 32,195
1918	128,420	(h) 1,482,833	(a) 37,210	61,613	(a) 40,018
1919	190,552	2,270,053	44,958	72,417	(a) 44,731
August 1920	221,213	—	—	—	—

(a) At the end of June.

(b) Average of four quarters.

(f) At the end of December.

(i) Rupee converted at the rate of 1s. 4d. throughout.

(h) In addition there had been issued by the end of 1918 short-term scrip notes (Kassscheine) to the amount of £309,083,000.

End of.	Aus- tralia.	New Zealand.	British India. (i)	Swiss National Bank.	Germany.	
					Imperial Bank Notes.	Loan Bureau Notes.
December 1913	9,980	(e) 1,674	43,060	12,553	127,511	—
1914	19,831	(e) 1,998	40,553	18,236	248,090	21,928
1915	41,766	(e) 2,846	41,560	18,624	340,131	47,347
1916	46,660	(e) 4,050	54,780	21,461	396,060	140,961
1917	47,901	(e) 5,411	72,207	28,092	563,831	307,636
1918	59,046	(e) 6,267	98,060	39,028	1,090,910	497,026
1919	56,603	(e) 7,087	121,940	41,445	1,755,169	673,191
August 1920	—	—	108,847	36,075	2,871,393	649,334

Marks and crowns and roubles had ceased to be any real measure of value—how can you measure with a piece of elastic?—and recognition of the fact could be nothing but salutary. The people themselves found they had been fed by fallacies. The belligerent governments practically told them that, since some money could buy real things, therefore more money could buy more real things; that the issue of a note called into existence the bread and beef and beer that it could once purchase, just as though the multiplying of yard sticks could increase the number of bales of cloth, or the taking of the photographs of all babies double the birth rate. A picture of the dishes at the Lord Mayor's banquet will not feed a hungry man, nor all the illustrations of a tailor's catalogue keep him warmly clad. The sign without the thing signified is an irritant, far better get back to realities, in short to gold.

We in Britain are steadily if slowly nearing the time when there will be absolute parity between paper and bullion and coins; other peoples, who have diverged farther from the gold basis, have a more laborious task.

An Intelligible
System.

Yet it is not an insuperable one. Parallels are difficult to trace; the world has not stood still since the days of John Law and his Mississippi bonds, since the Napoleonic War, the Bank restriction, and the assignats. Yet history has its lessons. It suggests first of all that the earlier the problem is tackled, the less drastic need be the treatment: a few blisters from a mustard plaster at the early stages of a cold are preferable to the perilous remedies we must seek when pneumonia has developed. What will be done with the depreciated paper? During the last two hundred years, governments having hit upon a happy device for silently confiscating a part of their subjects' property, we have had instances of complete redemption, of a scaling

down to the gold standard, and of absolute repudiation. The United States itself affords two instances of the last, the Continental Bills of 1777 and the Confederate notes in 1865; France affords two, in 1720 when the South Sea Bubble burst, in 1796 when the assignats became just as worthless as scraps of old newspapers; Colombia (1811), Peru (1822 and again in 1875), Portugal (1846), Uruguay (1865), have all been bankrupts with much to pay and nothing to pay with. The breakdown of confidence in the first French repudiation came with astonishing suddenness, and directly as a result of government action. The agents of government then were less hardened sinners than the modern operators of the government printing presses; they were dismayed at the rapid fall in purchasing power of the multiplied notes, and they tried to bring the real value nearer to the nominal value. Their effort brought unexpected and utter collapse. "All that people looked to," said Senior speaking of this collapse of 1720, "was nominal value, and while notes were called livres, nobody inquired what a livre meant. But the instant the denomination was altered; the baselessness of the paper fabric was detected. The terror was as universal and as blind as the confidence had been. On the 22nd May a man with one hundred millions of bank notes in his pocket might have starved in the street." The inconvertible note is all alloy; and when people no longer trust the promise it embodies, it becomes worthless. The fiat of government can do much. But it cannot perpetuate the delusion that the printing of a piece of paper calls into being bread and beef and boots represented by the paper.

The fallacy of the assignats, issued by the French Revolutionary Government, was that since
 Much Paper, they represented a real thing they could not
 Much Poverty. depreciate. They were an attempt to coin the whole land of the country into money; they assigned to their

holders a portion of the confiscated land, the land of the Church and of the old nobility. The hope seems to have been that the notes would come back to the Treasury in return for this land. The hope was disappointed, however; the assignats representing land became prodigiously multiplied; they could no more keep up their value than the land could have done if it had all been in the market at once; and just before the notes were declared worthless, it needed an assignat of five hundred francs to pay for a cup of coffee. The last quotation before their being repudiated was $\frac{1}{1700}$ of their parity value. It was the stress of war, too, that led to the over-issue of the United States Continental Notes, with which the barbers ultimately papered their shops—as our enterprising tradesmen gave away 1,000 rouble notes with every pound of chocolates bought—and which gave us the byword, “not worth a continental.”

Where there is no repudiation, and there need be none, two courses are open to the governments
 Alternative to Repudiation. intent on returning to the only basis on which the currency system can rest securely. They may adopt the healthy, bracing policy of honouring—at whatever sacrifice—their promises, and redeeming the paper money in full.

A promise is a promise, even if made by a government. This was our method after 1816, when during the period of the Bank restrictions a premium on gold had developed; it will, of course, be our method in the gradual redemption of our Treasury Notes. At present it is a matter of indifference to a farmer in Aberdeen that by presenting his note at the Bank of England during office hours he may get gold; it is, indeed, to the Londoner, too, since he can use the gold in no other manner than as a means of payment—he cannot melt it, nor export it. No one, however, doubts the ultimate convertibility. France also

is steadily recuperating, and her Treasury has made the satisfactory announcement that there will be no need of credit to balance next year's budget. Our neighbours, therefore, may possibly astonish the world by meeting their obligations in full. It will be a great achievement if she does, since the mass of her war obligations has been contracted in a depreciating currency.

The second course is the more likely, and probably the more equitable. Most of its engagements have been made in a depreciated currency; and it may well be decreed that French francs shall be turned into Swiss at the market value. There will be a kind of composition with creditors, the holders of the notes; a five franc note will be taken possibly as a two franc note. The reform would entail, of course, a writing down of all bank deposits, all internal contracts and obligations, all legal instruments of payment; and it might even be possible to induce foreign creditors to accept the composition. The United States might be willing to accept part payment though reluctant to renounce its whole claim. The purchasing power of the note will be unaffected; there will simply be a recognition of the actual state of affairs, with the blessing for which the business world is craving of henceforth conducting business on an intelligible basis. This method of changing an old currency into a new was, you note, that adopted by Japan when in 1890 she adopted the gold standard in place of her silver standard. The gold yen was made equal in value to the silver yen as it stood at the time. Clearly, there was nothing unjust in this; the price of silver (in gold) had fallen since 1873, and none could feel aggrieved when he obtained as much gold as his silver would have bought in the market. We may take it, likewise, that none who within the past year has contracted in marks expects to get

The Possible
Course.

gold marks; he will be quite happy—he will at all events cut his loss with equanimity—if he gets the market value in Swiss francs and if he need fear no further depreciation. Paying off the Austrian crowns and Russian roubles and Polish marks at their market price in gold is, to be sure, hardly to be discriminated from absolute repudiation. It would, however, be less unsettling to the minds of men; and the countries giving even so light a recognition of their obligations would have such satisfaction as the composing debtor has in not being made an out-and-out bankrupt; and it would bring hard facts home and rouse men to cope with them. At the moment, whether from the lethargy of despair or from the loss of moral fibre due to war's disasters, the peoples of the near East are unable to bestir themselves, and are still fondly cherishing delusions, that of fiat money, for instance.

The current¹ Viennese papers tell us that 20,000,000 of krone notes are daily being printed, and that when the enormously multiplied State employees get the wage advances for which they clamour, this total will be greatly increased. A change of name is not invariably a blessing; it is, though, when retention of the old rich-sounding terms leads to a self-delusion, when a man's subconsciousness suggests that "mark" in 1921 is somehow connected with "mark" in 1913. We shall probably do well to call a spade a spade; it is a spade, and we may as well recognise the fact. We shall probably do well to stop speaking of a three-thousandth part of an ounce as though it were an eighteenth part of an ounce of gold; the German mark is now equivalent to about three-thousandths of an ounce of gold, and it is nothing but healthy to accept the truth. Things have gone so far that we may be pretty certain that

¹ June, 1922.

tinkerings at the shattered fabric of the European currency system will not avail. I lay the fire badly, and the application of a light disappoints; I blow and puff, I push in fresh paper and try to coax the chips alight; in the end I must relay the fire. Far better to take the decisive step at the first and begin *ab initio*. The sooner the Governments of Europe realise that their salvation lies in getting back to gold, and that their own business men have showed them the way, the better for all concerned. "Money is gold and nothing else," said Pierpoint Morgan, who knew what he was talking about. The gold standard has the confidence of mankind, and no artificial standard, however ingenious, can replace it.

You agree, then, that a note, being a promise to pay gold, should be at once convertible into gold; and the problem is posed. "How shall that immediate convertibility be assured?"

Exhaustive investigations were made by Lord Cunliffe's Committee on Currency into this question; and there seems little possibility of finding fault with their conclusions. First: is it necessary to have any regulation at all in the interest of the holders of notes? Cheques are practically unrestricted; why not notes? The effective answer seems to be that cheques are mainly the signs of faith among business men in one another and in the banks; the business man knows, or ought to know, whom he can trust; and he has abundant means of knowing what bank he can trust. He can close his account with it at short notice and without trouble. The cheque currency—deposits operated upon by cheque—is admirably suited to a business community. The note currency is different, however. Notes come into the hands of people unable to judge of their goodness (of their possibility of being immediately turned into gold). Some provision is needed

for guarding the economically helpless. Bank notes are a part of the currency; and the reasons that impel the State to control the metallic currency apply with equal force here.

Some people advocated that, in order to create a supply of credit money for trade and industry, a further supply of legal tender money (Treasury notes or bank notes) should be printed. This would form a basis upon which the banks could make large loans. Such a policy would have been, however, quite incompatible with an effective gold standard. There would have been no check upon the outflow of gold. Unfavourable exchanges could not be corrected by the resulting raising of prices. Rather, the additional issue would make more intense the demand for gold to meet payments abroad; and our gold standard would in the end be destroyed through the loss of our gold. The Committee declared: "The device of making money cheap by the continued issue of new notes is thus altogether incompatible with the maintenance of a gold standard. Such a policy can only lead in the end to an inconvertible paper currency and a collapse of the foreign exchanges, with consequences to the whole commercial fabric of the country which we will not attempt to describe. This result may be postponed for a time by restrictions on the export of gold and by borrowing abroad. But the continuance of such a policy after the War can only render the remedial measures which would ultimately be inevitable more painful and protracted. No doubt it would be possible for the Bank of England, with the help of the Joint Stock Banks without any legal restriction on the Note Issue, to keep the rate of discount sufficiently high to check loans, keep down prices, and stop the demand for further notes. But it is very undesirable to place the whole responsibility upon the discretion of the banks, sub-

ject as they will be to very great pressure in a matter of this kind. If they know that they can get notes freely, the temptation to adopt a lax loan policy will be very great. In order, therefore, to ensure that this is not done, and the gold standard thereby endangered, it is, in our judgment, imperative that the issue of fiduciary notes shall be, as soon as practicable, once more limited by law, and that the present arrangements under which deposits at the Bank of England may be exchanged for legal tender currency without affecting the reserve of the Banking Department shall be terminated at the earliest possible moment. Additional demands for legal tender currency otherwise than in exchange for gold should be met from the reserves of the Bank of England and not by the Treasury, so that the necessary checks upon an undue issue may be brought regularly into play. We recommend that the Note Issue (except as regards existing private issues) should be entirely in the hands of the Bank of England; the notes should be payable in gold in London only, and should be legal tender throughout the United Kingdom." You notice that the parenthesis in the last sentence is no longer needed; in 1921 the last bank having the right to a private issue disappeared.

What machinery is best for the control of the Note Issue? Different answers are given under different systems of currencies. Our own answer is embodied in the Bank Charter Act of 1844; and this answer, in the opinion of the Committee, needs but a slight modification. There is a fixed fiduciary issue: beyond that sum notes should be issued only in exchange for gold. From 1866 till the outbreak of the European War no suspension of the Act was called for. "We think that the stringent provisions of that Act have often had the effect of preventing dangerous developments;

Our
Machinery
for Note
Control.

and the fact that they have had to be temporarily suspended on certain rare and exceptional occasions (and those limited to the earlier years of the Act's operations, when experience of working the system was still immature) does not, in our opinion, invalidate this conclusion." We shall, therefore, have a continuance of the separation of the Issue Department from the Banking Department of the Bank of England; and the Weekly Return will continue its present form.

The slight modification of the 1844 Act is meant to provide ready means of providing emergency currency in times of acute difficulty. Before 1914 such currency could be issued only by breaking the law, and afterwards obtaining an indemnity from Parliament. The Currency and Bank Notes Act of 1914 gave the Bank of England, with the consent of the Treasury, the right to issue notes in excess of the legal limit. This right, however, should be rigorously controlled :

- (i) Parliament should be at once told of any step taken by the Treasury in this matter ;
- (ii) Any profits from the excess issue should be surrendered by the Bank to the Exchequer ;
- (iii) The Bank Rate should be raised to as high a figure as will ensure the earliest possible retirement of the excess issue.

Our method of assuring the immediate turning of notes into gold is the restriction of issue: after a comparatively small amount of note currency has been issued, any further issue is merely a bullion certificate. A bank note becomes a warehouse certificate; and the primary purposes of the note—the saving in wear of the metals and the greater convenience of handling—are again prominent. The greater the issue of notes, the higher becomes the relation

Other
Machinery
for Control of
Note Issue.

of gold to notes; and the security of the notes become thereby the greater.

The method of proportional reserve has in some instances been adopted. A fixed fiduciary issue was ordained. Notes issued above the limit are, however, not covered in full by gold, but by a proportion of gold. The objection of this method from our point of view is that the withdrawal of gold for export would cause a great fluctuation in the note issue. If, say, the proportion of gold to notes is fixed at one-third, then, as the gold was withdrawn, the notes would require to be withdrawn in the ratio of three to one. The method appears to work well enough in the Bank of Belgium and the Bank of Spain; with our great foreign payments it would be inapplicable.

The French method is that of fixing a *maximum* issue—a maximum fixed so high that it is hardly likely ever to be reached. Indeed, since 1870, when first a maximum was enforced, successive varyings of that maximum have taken place whenever the issue seemed approaching that fixed. In practice, therefore, we may say that the French issue is unlimited; no reserve is stipulated, whether an absolute amount or a proportional one, the Government itself in a manner takes charge.

A maximum limit has been suggested, the very desirable elasticity being obtained through the possibility of exceeding this maximum on payment of a tax. This is the German plan. The criticism has been made that such a plan would make possible excessive speculation, which more stringent regulations might have averted. Certain systems are examined in an Appendix.

CHAPTER XIV.

RECENT DEVELOPMENTS IN ENGLISH BANKING.

Our banking system was not the birth of a single day ;
A Process of it did not spring forth, fully equipped and
Development. able to cope with the complexities of modern
business, as the goddess of wisdom did from
the head of Jupiter. It is rather an adaptation, slowly
moulded into such a shape as shall most conduce to the
smooth working of commerce. It has been evolved to help
trade and traders. And, because it has been gradually
adapted, not because it is built upon a carefully conceived
plan, it works the better in practice. Changes in the
system are incessant ; we need not complain of lack of
enterprise and initiative on the part of our great bankers.
They are ever on the lookout for methods of making
profit, and when their search is a successful one, the
community as well as the bankers is almost invariably
benefitted. We have recently, for instance, had a surprising
extension of the foreign exchange business of the banks.
Every branch bank is now prepared to transact such
business, to sell you marks or buy them from you ; the
extraordinary fluctuations in quotations seemed to promise
to many more excitement than betting on a horse-race
could. Is this good for the business world ? Certainly,

the facilities afforded by the banks to a great extent fed the spirit of speculation; those facilities undoubtedly made real trade less of a gamble.

A useful departure—first devised, it would appear, by the London Joint City and Midland Bank—mentioned by the Chairman of Lloyds in his review of 1921 should also be noted. This is the "World Letter of Credit." A man desiring money facilities on his travels buys such a letter and where ever he goes throughout the commercial world, for our English banks have their agencies from China to Peru, he can without difficulty obtain money. The Letter of Credit is easily bought, easily carried, easily used; and it is, therefore, in great demand. The banks are nowadays, too, undertaking more trustee business than they did formerly. We have indeed a Public Trustee to whose charge legacies may be confided. But we are told that the management of trustee accounts by the bank is more elastic than his, and can better serve the interests of those whom the legator wishes to benefit. The bank's charges, too, are it would seem decidedly lower.

Another recent device, less for profit than for smooth working, has been the effort made, by the Bank of England in conjunction with the Treasury, to make the stream of banking credits and debits a steadier one. The interest on the various War Loans is paid at varying times so that practically every month requires great payments from "Public Deposits." And arrangements for paying income and other taxes by instalments assure a counter-current of payments into "Public Deposits." Whatever makes for steadiness in the Bank's returns makes for steadiness in the outer banks; and when bankers are thus able to calculate with more accuracy they can serve the public better, they need not appropriate so big a margin of profit to balance the possibility of miscalculation.

These are minor changes, however. The two outstanding features of the past century's developments in banking are: (1) the centralisation of banking, (2) the shifting of importance from notes to deposits. Our banking system is now as real a unit as our railway system is. Different names are given to different banks, as the railway lines are called by different names in different parts of the country. The curious, and cumbrous, names of certain of our great Joint Stock Banks are standing evidences of the building up process. We have still a multiplicity of names. But through the London Bankers' Clearing House; through the link supplied by the keeping of balances at the Bank of England; through the dependence of all the banks on the single reserve in the Banking Department of the Bank of England; through the influence of the "Bank Rate" of discount upon the money market; through the unifying influence of the Treasury, which to a growing extent eagerly consults with and takes the advice of the great bankers, those economists in practice,—our system is one. The prosperity of one bank helps the whole banking world; the adversity of one fills the others with dismay. The second great change, the almost complete supersession of the bank note by the deposit operated upon by cheque, is an instance of the impotence of regulation to control economic movements. The business world wanted a currency that would expand and contract according to the needs of business; the Bank Act of 1844 prevented the bank note from becoming such an elastic currency; and the business world, bankers and merchants, developed the cheque system. So it comes about that the less important part of our paper money is elaborately regulated and restricted, and that the really important is left pretty much to the prudence of the banker. In theory our paper money is actual currency.

is an equivalent for the gold of which for convenience' sake it takes the place. In practice it is a supplement to the currency, not a substitute; and it is a supplement perfectly adjustable to the demands of trade. •

Consider these two developments in detail. Our one-reserve, centralised, closely-linked system was long admired by the Americans, and when in 1912 they passed their Federal Reserve Act they imitated it. This Act aimed at securing control of credit issues by adapting the central banking system of England to American conditions. The Federal Reserve Banks are expected to exert an influence similar to that of the Bank of England. The American Financial crisis of 1907 seems to have shown that the fifteen thousand individual banks of the United States, each a financial unit, could not effectively cope with a monetary panic.

Apparently there, as with us at the opening of the nineteenth century, any man who was able to rent a corner block, lay down a marble floor, and put in mahogany desks, could call himself a Bank or a Trust Company. Sharp experience long ago taught us that not every man deserved enough public credit to conduct banking business and to issue his notes. At the close of the Napoleonic Wars we had ourselves over 900 banks issuing their own notes; it was a new El Dorado for an impecunious trader when he found that he could make his notes circulate as money, that he could borrow without price from the public that which he could lend at high interest. Difficulties arose when the banks failed to maintain even the narrow margin necessary to ensure payment. Between 1813 and 1815, 280 banks failed; in 1825 actually eighty-two stopped payment during a single disastrous month. The process of elimination of the unfit went on until in 1844, the year of the Bank Act, there were 207 note issuing

private banks. Since then amalgamation with the Joint Stock Banks has been the main cause of the disappearance of the private banks. In 1919 there were only six survivors: and in 1921 the last of all went—Messrs. Fox, Fowler and Company of Wellington, Somerset, its bank note issue being extinguished upon its amalgamation with Lloyds Bank, Limited. This was in fact the only amalgamation noted in 1921: it is interesting as involving the extinction of the last bank in England and Wales possessing the right to issue its own notes. The Bank of England now has the monopoly in this country of note issue, and its note has come to be looked upon as a banking reserve rather than as part of the currency, and moreover as a banking reserve that can in times of great exigency be made indefinitely greater. The Act of 1914 authorises the Treasury in time of stress to sanction an issue beyond the limit laid down by the Bank Charter Act. The awkward and roundabout method of obtaining an Act of Indemnity when more legal tender was called for is thereby obviated.

The lessening in the number of banks has not led to a lessening of banking facilities. True, we had at the end of 1921 only twenty-eight banks in business in England and Wales.

With two exceptions, also, the drafts of these banks passed through one or more of the three London Clearings. But these banks have covered the country with branches; there are indeed over 7,500 banking offices in England and Wales. And, of course, the position of the manager of one of these branches is very different from that of an independent banker in the old days. The bank manager may, in any difficulty, speedily command the resources of the head office; the head office can rely upon the help of the Bank of England; and the whole system works down to a minimum of reserve cash. One

Increase
in Banking
Facilities.

great incentive to amalgamation is in fact this possibility of cutting calculations more finely, of allowing less margin for error. The larger the numbers considered the steadier they are. One suicide in a village of five hundred makes a great difference in the annual percentage; one more or less in London has no appreciable effect. The bigger the sweep of the banking net, the more people included in the Cheque and Credit system, the more nearly will payments out of the bank balance payments into the bank. The one danger to be feared then would be that people will of a sudden seek "hard" money, will be content with nothing except what is a material, tangible "store of value." We need not anticipate this, however; nor under any banking system would it be possible to fight against such a revulsion of feeling.

How far flung is the influence of a great bank we can realise when we consider such surveys as the **The Influence of a Great Bank.** leaders in the banking world give. Essential facts, for instance, are by the Deputy-Chairman of Lloyds effectively brought home to us in relation to international trade. "Without a sound banking system neither the country nor the commerce of the country can prosper. Soundness and strength alone, however, are not sufficient. We must also have enterprise and initiative in their proper degree, a wise sympathy with the needs of trade, and a sincere readiness to find a solution for the many new and complicated difficulties of present-day finance. Other nations have their own special difficulties; but in one respect we are unique. Four-fifths of our population live in towns. We are the most urban and therefore the least agricultural and the least self-supporting community that has ever existed. By our own action in this respect we have given immense hostages to fortune. No other nation in the world is in anything like this position. None draws its subsistence from such varied

and distant sources as we do. None lives as we do by what it exports. None has staked so much on the ability of its manufacturers and its merchants to hold their own against all rivals in all quarters of the globe. None, again, is anything like so dependent as we are on the smooth working of those processes of international trade by means of which, for instance, meat from New Zealand is paid for by the export of cotton goods to China.

The loss of their foreign trade would be a blow to all countries, but to us it would be an irreparable disaster. For it is our chosen part to eat in these northern isles what has been grown thousands of miles away, to turn into a finished product the raw material that has reached us from the other side of the world; and to settle the account by the goods we send abroad, the shipping services we render, and the capital we lend and invest in any land where capital can be profitably employed.

We took enormous risks—how great they were we realised during the War—but time has justified them. We sacrificed security in the matter of home-raised food for the sake of a world-wide trade; and, but for that sacrifice, hardly more than 15,000,000 people would be living in Great Britain to-day.

So far the gamble has come off, but it must never be forgotten that we stand or fall by the abilities of our towns to sell their manufactures all over the world in rivalry with all other peoples. Anything that prevents us from exporting the products of our factories in payment for the food without which we should starve, and the raw material without which we cannot work, throws our entire economic system into disorder.

Other nations are more self-supporting, and do not depend for their food on different lands. Other nations may suffer revolutions, privation, and anarchy; but their agricultural millions will save them eventually from any

injury it is within the compass of their industrial hundreds to commit. In our case our life depends upon our capacity to sell our manufactured goods abroad in exchange for our daily bread. The census returns show exactly 42,767,530 reasons why we should have industrial peace at home and unrestricted trade with the world outside.

Banks can do much in assisting in building up and maintaining our foreign trade. This bank has made special efforts in that direction. We own practically all the shares of the National Bank of Scotland, 98 per cent. of the shares of London and River Plate Bank, operating in South America, New York, Lisbon, Paris and Antwerp. We are partners with the National Provincial and Union Bank of England in our foreign bank, with branches in France, Belgium, Switzerland and Cologne, and, to mention some others, we have large interests in the Bank of British West Africa, the British Italian Corporation and the National Bank of New Zealand. By our ownership in full or part of our affiliated or auxiliary banks operating abroad, we believe we are in a position to give as full facilities and provide as ready and economical machinery for foreign trade, and to bring these islands into as intimate and close touch with the countries named as we can devise. We hope, therefore, we are playing our part in conducing to our country's welfare, and that we shall continue to do so not without a reasonable profit to ourselves."

The second development that has, since 1844, not modified but quite revolutionised our banking system is that of the cheque. John Stuart Mill, writing in the middle of the last century, and commenting on the possibility that cheques might cause an undue expansion of credit, has a curious note. He argues that the restrictions imposed by the Act of 1844 were some obstacle to such an

Cheque
Currency is
Uncontrolled.

expansion; and he suggests: "It would not be to the purpose to say, by way of objection, that the obstacle may be evaded by granting the increased advance in book credits, to be drawn against by cheques, without the aid of bank notes. But this substitute for bank-note currency certainly has not yet been organised; and the law having clearly manifested its intention that, in the case supposed, increased credits should not be granted, it is yet a problem whether the law would not reach what might be regarded as an evasion of its prohibitions, or whether deference to the law would not produce (as it has hitherto done) on the part of banking establishments, conformity to its spirit and purpose, as well as to its mere letter." The cheque currency is now, however, so admirably organised that it performs, smoothly, speedily and cheaply, the bulk of exchange work. And it is the second alternative that impels our bankers to follow the lead of the Bank of England in making credit facilities more difficult to obtain. It is certainly not by compulsion of law. The cheque currency is untrammelled by government regulations, and is all the better for the freedom.

The essence of the cheque system is that purchasing power, is for the most part in the form of Bank Deposits. bank deposits operated upon by cheque. The legal tender money—gold and subsidiary coin, and Bank of England notes representing gold—could adapt itself to the needs of commerce only with difficulty. There was, under the Bank Charter Act of 1844, no means whereby the legal tender currency could be increased except the importation of gold (either to form the basis of an increase in the note issue of the Bank of England or to be passed to the Mint for coinage). Gold already in use, as watch cases or ornaments, might conceivably reach the Mint; but probably this rarely happened. Nor could

the legal currency be diminished—apart from the ordinary demand, about £2,000,000 a year, by jewellers and others—except by the export of bullion or sovereigns. The cheque currency can, unlike this slow moving currency, adapt itself at once to the requirements of the business community. Each merchant becomes his own note issuer; he issues it to the exact amount called for by the transaction; the transaction and the drawing of a cheque are coincident so that, according to our quantity theory of money, prices are kept stable. So long as the men drawing the cheques are thought to be men of substance, the system works without a hitch. There are limits, no doubt, to the creation of the deposits that enable men to draw cheques. These credits rest upon real foundations: the banker does not grant them without discrimination. The credits are granted upon condition of interest payments; and the borrowers must be able to earn the interest. And, since the bank granting the credit must be prepared if need be, to meet the cheques in legal tender, a reserve of legal tender must be held. As the scale upon which banking is conducted becomes larger and more closely knit, so the reserve called for becomes smaller but more mobile. Some reserve though, there must be. The cheque currency is thus a supplement to the coin and bank-note currency; it is not what the law of 1844 contemplated for our paper currency, a mere substitute. The Currency Principle rules in theory; in practice we live under the Banking Principle.

This contention—now obsolete, for the development of the cheque has made bank notes of but slight importance—refers to regulations regarding the issue of notes. Should this issue be left to the prudence and intelligence of the issuing bank (Banking Principle), or should it be minutely regulated by the State, by the

Banking
Principle v.
Currency
Principle.

Authority controlling the currency (Currency Principle)? If the first, then the issue could expand and contract with the varying needs of commerce; the bank note would, when trade is brisk, be an accession to the currency. The bank's notes would represent the credit of the bank, they would be issued against the assets of the bank—not against gold; and the amount of issue would be regulated solely by the needs of the bank's customers. If the second, the bank note would be restricted to its first historic function, the saving of the inconvenience of handling large sums. It would be a modern goldsmith's receipt acknowledging the deposit of gold.

Pushed to its logical conclusion the Currency Principle would make a bank note a mere bullion certificate. This extreme view, to which indeed the opinion of the "City" seems tending now that the cheque performs so great a part of the work of money, is best put in Lord Overstone's words before the Committee preceding the Bank Act of 1844:

"A metallic currency, I conceive, by virtue of its own intrinsic value, will regulate itself; but a paper currency, having no intrinsic value, requires to be subjected to some artificial regulation respecting its amount. The use of paper money is resorted to on account of its greater economy and convenience; but it is important that that paper currency should be made to conform to what a metallic currency would be, and especially that it should be kept of the same value with the metallic currency, by being kept at all times of the same amount. Now, the influx and efflux of bullion is the only sure test of what would have been the variations of a metallic currency; and therefore I conceive that that constitutes the only proper rule by which to regulate the fluctuations of a paper currency."

Wherever and whenever the Banking Principle has been allowed to operate untrammelled, over-issue of notes and ultimate bank-failure have resulted. The over-issue may not have been in excess of what could eventually be redeemed; in numberless instances it was over-issued in excess of what could be redeemed at the moment. This latter is what matters to the banker. If conversion is delayed the notes depreciate, and the distrust engendered may mean a grievous blow at our whole credit structure. Experience seems to show that some regulation is necessary: the keen competition of the banks would make them venture large issues on a slight basis. And it is to be remembered that the object of allowing a bank to issue notes is not to enable it to make money, but to enable it the better to serve the public. A little less profit with a deal more security is only reasonable.

The first essential of an efficient bank note-issue is safety. Perhaps our Bank Charter Act (1844) was even over cautious in the matter. It certainly did not quite adopt the principle that every note must represent bullion; for it recognised a fiduciary issue of £14,000,000 (the circulation of notes for some years never having been below £16,000,000). Through the falling in of private note issues, the fiduciary issue (since 1907, the last occasion on which the Bank of England troubled to avail itself of lapsed issues) is now £18,450,000. Every note issued beyond this amount is a certificate that gold to the amount named is in the custody of the Issue Department. The gold immobilised is looked upon as absurdly large. It is, if we look upon it merely as a reserve to insure convertibility of the notes issued. It is not, however, if we look upon it as a basis upon which, in time of need—as during the once recurrent crises, and in 1914—

additional note issue may be authorised. The loss of interest entailed by the immobilising of the gold may be looked upon as an insurance premium against collapse of our credit structure—an insurance premium paid by the Bank of England as some return for its many privileges.

CHAPTER XV.

THE FOREIGN EXCHANGES.

Foreign Exchange may be looked on as a barter of the *Value* of goods, payment in one country being exchanged for payment in another country. A debt payable in one country has a certain value in another country; what is that value and how is it fixed? The value becomes identified with the readily transferable piece of paper; and this piece of paper, this Bill of Exchange, becomes a part of the money that enables the workers of countries to co-operate with one another. In Appendix 4 we consider for a while the legal aspects of a Bill of Exchange. The three problems that enter into the study of the Foreign Exchange are:—

- (1) The ascertaining of the various elements (exports and imports, loans, freights, commissions, and so on) that go to make up the balance of indebtedness among nations;
- (2) The nature of the instruments adopted to effect a settlement;
- (3) The reasons for variations in the cost of these settling instruments.

Before we tackle these problems we had better clear up a point or two.

One possibility of error in understanding something of the Exchanges is the following. We speak loosely of London owing money to New York. The meaning is that on balance, London individuals—not the whole business community—owe to New York individuals. New York is not a malignant creditor, exacting from unlucky London the utmost coin. The transactions are those of individuals; a London banker sends gold across the Atlantic because it pays him to do so.

The rate of exchange is either the number of units of the foreign money that a sovereign will buy, or the cost of one unit. We may say how many francs in Paris a sovereign in London will buy; or we may say what part of a sovereign in London must be given to obtain credit for one rupee in Calcutta. With few exceptions, our method of quoting is to state how many units of the foreign currency a sovereign will buy. Thus we have the following very interesting discussion, from *The Times'* annual financial review dealing with features of the rates during 1921:—

“Inasmuch as Great Britain was the only important European country to balance its Budget in 1921, the improvement in the value of sterling was to be expected. But it is important to note that while sterling has improved by nearly 20 per cent., French and Belgian francs, the Italian lira, the Danish kroner, and the Czech-Slovakian crown have improved to a greater extent. Yet the financial position of these countries cannot be regarded as having improved to a greater extent than that of Great Britain, for all of them are still using the printing press. But these inconsistent movements in exchange are inseparable from a paper currency regime. The exchange value of a paper currency does not represent its purchasing power parity, as in theory it is supposed to do. Hence the problem of the

	Dec. 31, 1921. Purchasing Power of £1 sterling as compared with pre-war.	Dec. 31, 1920. Purchasing Power of £1 sterling as compared with pre-war.	Rise or Fall on the year.
	£ s. d.	£ s. d.	£ s. d.
France	2 1 2	2 7 4	- 6 2
Belgium.....	2 3 4	2 5 1	- 1 9
Italy ..	3 16 6	4 0 6	- 4 0
Norway.....	1 8 11	1 5 5	+ 3 6
Denmark	1 3 1	1 5 6	- 2 5
Finland	8 17 4	4 12 5	+ 4 4 11
Germany	37 15 2	12 12 8	+ 25 2 6
Greece	3 18 7	1 18 2	+ 2 0 5
Austria	457 19 0	63 9 9	+ 394 9 3
Roumania	22 16 3	11 4 11	+ 11 11 4
Portugal	11 17 0	8 4 0	+ 3 13 0
Spain	1 2 4	1 1 0	+ 1 4
Brazil.....	2 3 5	1 12 8	+ 10 9
Warsaw.....	599 19 2	110 4 0	+ 489 15 2
Prague	11 13 2	12 16 0	- 1 2 10
Argentina	1 2 1	18 8	+ 3 5
New York.....	17 3	14 6	+ 2 9
Montreal	18 2	16 10	+ 1 4
Holland.....	18 11	18 8	+ 3
Sweden	18 5	19 6	- 1 1
Switzerland	17 1	18 5	- 1 4
Japan.....	18 0	15 4	+ 2 8
India	1 0 0	18 2	+ 1 10
Shanghai	13 3	11 3	+ 2 0

exchanges. Before the War parities were secured by what was almost an automatic flow of gold from the country with the low gold point—that is to say, from the country with a lower purchasing power for its currency—to the high gold point country—*i.e.* the country with the higher purchasing power. But paper currency, unlike gold, not being international legal tender, there is no ready means of securing an equilibrium between countries having an inconvertible note as currency.

In the case of eight countries—namely, Italy, Roumania, Spain, Greece, Germany, Austria, Poland, and Norway—their currencies reached the lowest value in sterling on record. At one time 26,000 Polish marks were required to purchase a pound. But at the close of the year less than half this quantity was required. The Vienna exchange touched 14,000 crowns to the pound, the Berlin 1,275 marks, the Athens 104 drachmae, the Spanish ps. 31·30c., the Roumanian 895 lei, and the Italian 109½ lire. The depreciation in Roumanian lei so demoralised the market that the Government put in force certain regulations for eliminating speculation, but the only result was virtually to stop dealings in lei. Austria also attempted some form of exchange control. A distinction was made between the Ausland crown and the Inland crown. At the end of the year the difference in value between these two kinds of crowns was very marked, the Ausland rate being 11,000 to the pound, and the Inland rate about 28,000. But the difference was an artificial one.

In the subjoined table, the exchanges of the principal countries on December 31, 1921, are compared with those on December 31, 1920, the highest and lowest rates of the year being also recorded :—

Paper
dislocating
Values.

	Parity.	Dec. 31, 1921.	Dec. 31, 1920.	During 1921. Highest.
New York	4·86 $\frac{5}{8}$	4·21 $\frac{1}{16}$	3·54 $\frac{1}{4}$	4·24
Montreal	4·86 $\frac{5}{8}$	4·43 $\frac{1}{4}$	4·10 $\frac{1}{2}$	4·59
Paris	25·22 $\frac{1}{2}$	51·90	59·70	61·75
Brussels	25·22 $\frac{1}{2}$	54·52 $\frac{1}{2}$	56·85	61·60
Italy	25·22 $\frac{1}{2}$	96·50	101·50	109 $\frac{1}{2}$ *
Bucharest	25·22 $\frac{1}{2}$	575	283 $\frac{1}{2}$	896*
Belgrade	25·22 $\frac{1}{2}$	281 $\frac{1}{2}$	127 $\frac{1}{2}$	375
Madrid	25·22 $\frac{1}{2}$	28·12	26·48	31·30*
Berne	25·22 $\frac{1}{2}$	21·59 $\frac{1}{2}$	23·16	24·23
Athens	25·22 $\frac{1}{2}$	99·00	48·12 $\frac{1}{2}$	104·00*
Helsingfors	25·22 $\frac{1}{2}$	223 $\frac{1}{2}$	116 $\frac{1}{2}$	320
Lisbon	53 $\frac{1}{2}$ d.	4 $\frac{1}{2}$ d.	8 $\frac{1}{2}$ d.	8 $\frac{3}{4}$ d.
Amsterdam	12·107	11·39 $\frac{1}{2}$	11·26	11·83 $\frac{1}{2}$
Berlin	20·43	771	258	1,275*
Vienna	24·02	11,000	1,525	15,000*
Prague	24·02	280	307 $\frac{1}{2}$	430
Warsaw	20·43	12,250	2,250	26,000*
Christiania	18·159	26·17 $\frac{1}{2}$	23·65	31·75
Stockholm	18·159	16·70	17·69	17·90
Copenhagen	18·159	20·88 $\frac{1}{2}$	23·12	23·75 $\frac{1}{2}$
Alexandria	97 $\frac{1}{2}$	97	97 $\frac{7}{16}$	97 $\frac{15}{32}$
Bombay	2/0	1/4	1,5 $\frac{1}{16}$	1,6 $\frac{9}{32}$
Calcutta	2/0	1/4	1,5 $\frac{1}{16}$	1,6 $\frac{9}{32}$
Madras	2/0	1/4	1,5 $\frac{1}{16}$	1,6 $\frac{9}{32}$
Hong Kong	—	2/7 $\frac{3}{8}$	3,2 $\frac{5}{16}$	3,2 $\frac{1}{16}$
Yokohama	24·58d.	2/3 $\frac{1}{4}$	2/8 $\frac{1}{8}$	2/8 $\frac{3}{8}$
Shanghai	—	3/6 $\frac{1}{4}$	4/1 $\frac{9}{16}$	4/2 $\frac{5}{16}$
Singapore	—	2/3 $\frac{7}{8}$	2/3 $\frac{3}{8}$	2/4 $\frac{5}{8}$
Manila	24·06d.	2/2 $\frac{1}{4}$	2/6	—
Rio de Janeiro	27d.	7 $\frac{3}{8}$ d.	9 $\frac{1}{8}$ d.	10 $\frac{3}{8}$ d.
Buenos Aires	44·85d.	43 $\frac{1}{2}$ d.	51 $\frac{1}{16}$ d.	51 $\frac{3}{8}$ d.
Valparaíso	\$13 $\frac{1}{2}$	40·10	9 $\frac{5}{8}$ †	40·60
Montevideo	51d.	41	50	51
Lima	Par.	16% (a)	17 $\frac{1}{2}$ % (b)	17 $\frac{1}{2}$ % (a)
Mexico	24·58d.	28 $\frac{1}{2}$	34 $\frac{1}{2}$	34 $\frac{1}{2}$

* Highest quotation per pound on record. (Already far exceeded.)

(a) Premium. (b) Discount.

† In April last the method of quoting was changed from pence to peso to dollar to pound.

By far the most interesting exchange market was that for German marks. Since the close of 1918 Germany has pursued a policy of energetic inflation, and in that period her note circulation has been multiplied five times. The result has been to bring her gold prices much below the world level.

The Foreign Bill of Exchange is the instrument called into being by trade between individuals belonging to different countries. A cheque, we saw, is a command. The person who is entitled to draw a cheque is in the position of being enabled to issue an order to a banker: he tells the banker to pay a sum of money to a named person, or his order, or to the bearer of the cheque. A cheque is, however, only a special kind of these orders that transfers the possession of money. A Bill of Exchange (B/E) is the big class that includes cheques. Three persons may be concerned in it. There is always the maker (or drawer) to whom a debt is usually due: there can be no bill without a drawer's name; with this we have a perfectly good bill though no other name appears. The acceptor will ultimately put his name upon the bill unless indeed the drawer has no right to ask him to do so. But the bill can be dealt with (negotiated) before being accepted. There is the acceptor (or drawee) who may have the drawer's money available to pay the debt, and who presumably has agreed to pay the bill when it becomes due. And there may be the creditor (or payee) to whom the bill is handed in payment of another debt. Jones has sold goods to Smith and has bought goods from Robinson. In order to pay Robinson, Jones draws a bill on Smith; Smith accepts it; and Robinson obtains the money. A Bill of Exchange is an order by one person, addressed to another, directing the payment of a certain sum of money on demand, or at a fixed future time, to a

specified person, his order, or to bearer; and when accepted—authenticated, that is, by the signature of the drawee—it becomes an acknowledgement of debt. It confers a right to receive money; and this right may be transferred. The person who takes a bill in an honest manner is entitled to the payment promised in the bill; he may take it as confidently as he takes the current coin of the realm. How others may have obtained the bill matters not at all; the holder depends solely upon his own conduct. Though there has been fraud or deceit (but not forgery) in the making of the bill, or in its transfer, or though there is no real transaction to which the bill relates, the endorsee of a bill of exchange for value is entitled to the amount upon the bill.

By our cheque system we agreed that inland transactions could be settled wellnigh without the intervention of money; and the Bill of Exchange system has the same economising effect in relation to foreign trade. This trade does in the end what all other trade does: it permits men to help one another. By means of foreign trade not only people at home but people throughout the world become a society for mutual help, a big co-operative society. By its means the Hindoo gathering the tea-leaves in a plantation of Assam and the weaver in a Blackburn mill help one another. To an altogether unprecedented extent we in this country have become dependent for our essential supplies upon water-borne trade. Any slackening in the streams flowing upon us from every quarter produces want and distress; as sudden cessation of the streams would reduce us to helplessness.

How is it that we prevail upon peoples abroad to maintain these supplies; how do we pay, that is, for the imports upon which we have grown accustomed to rely?

We value the supplies in money, but if we were to pay in gold—the only international currency—our stock of the precious metal would be depleted many times in the year. We pay for the imports by ourselves rendering services. Our services, too, are valued in money, whether those services are embodied in cotton or iron or woollen goods, or whether they are such services as are rendered by bankers or by shipowners or by the various mercantile agents. The value of the services we give equals, in the long run, the value of the services we get. Obligations incurred (measured in gold) balance obligations conferred (also measured in gold): service pays for service. And the Bill of Exchange is the instrument that enables services to be offset by services. The Bill of Exchange gives its owner the right to a specified sum of money at a given time and place. This right can be bought and sold. The Bill of Exchange, therefore, so transfers property that it affords a cheap and convenient way of paying debts incurred in a foreign country; and enables a merchant who has sold goods abroad to be paid for his goods in money of his own country.

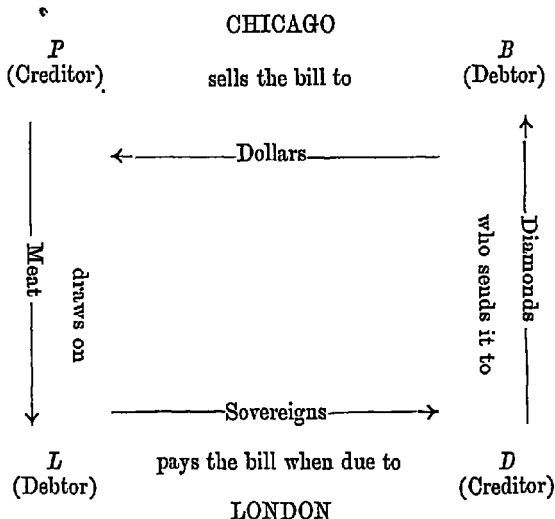
The Bill of Exchange, in the first place, saves the expense and risk of transporting the precious metals from place to place. This was their original function. For even before acceptance the bill may be perfect, and the early bills were drawn and circulated before actual acceptance. A man comes to another in London and says, "You have a debt to collect in Melbourne, haven't you?" "Yes, so-and-so owes me £1,000." "Well, I have £900 to pay there; would you draw upon your debtor for £900 of his account in favour of my creditor, and sell the instrument to me?" "I will." The instrument is bought, is sent to Melbourne; the acceptance is procured, and the money is paid on the maturity of the bill. The drawer's name is the essential

part of the bill; since the drawer is in the last resort responsible for the amount to be paid. You may safely take a bill *drawn* by a good man even though it has not been accepted. In the second place, however, bills permit a creditor to receive present payment of a debt due some time hence. This function is nowadays as important as the first.

A London merchant buys some thousand tins of meat from a Chicago packer. How is he to pay? The Work of a Bill of Exchange. He could send English money; but, in the first place, the packer wants dollars, not sovereigns; and, in the second place, the expense of sending gold across the Atlantic would add to the cost of the goods. All could be conveniently settled if someone in London, a diamond dealer in Hatton Garden, perhaps, sold to a buyer in Chicago an article costing as much as the meat. There would be a debtor and a creditor in both London and Chicago; and if the meat-buyer paid for the diamonds, and the diamond-buyer paid for the meat, everyone would be satisfied. The bill achieves this. *P* the packer, draws a bill for the amount of money due to him; *L*, the London importer, accepts the bill. He acknowledges his indebtedness, that is, and makes an unconditional promise to pay the bill when it becomes due. *P* now has the right to money in London. He sells this right to *B*, the buyer of diamonds, who wants to pay money in London. *B* sends the bill to *D*, the diamond merchant, who, by means of his bank, collects the money from *L*. All this seems very complicated; a diagram should show that it is really quite simple (see next page).

You realise that in practice a debt abroad is seldom thus offset by a credit abroad of exactly the same amount. Bankers and bill brokers are the reservoirs for collecting the credits on places abroad. Those who need to pay

abroad go to these reservoirs and tap them to the required extent. The banker's draft is a Bill of Exchange made to order.



It would simplify matters further if both countries had the same currency; we should not only be relieved from the need of sending money, we should be able at once to compare prices. There would be no need to remember that £1,000 contains as much gold as \$4,866. But, as J. S. Mill says, "So much of barbarism still remains in the transactions of the most civilised nations, that almost all independent countries choose to assert their nationality by having, to their own inconvenience and that of their neighbours, a peculiar currency of their own."

In fact, of course, there are in modern times innumerable transactions among trading nations; and payments must be made for many things other than commodities. There are quasi tributes to make in the form of administration expenses, remittances of revenue, of rents and other income to those living abroad, emigration of capital, or its transmission for foreign investments. All these payments constitute the obligations of one country to another; and in the long run they will balance one another. For no country, any more than an individual, can continue heaping up debt. This equation, when a country has as much to pay abroad as it has to receive, is rarely established. There will usually be a discrepancy between the amounts to be received and the amounts to be paid. The bill broker, buying bills from those who have money to receive and selling bills to those who have money to pay, may be asked for bills to a greater amount than bills are offered him. He will not refuse the bills on that account. His correspondents, however, in Chicago or elsewhere, cannot wholly meet these bills by setting them against the bills bought by the broker; part of the amount necessary must be sent in gold. The sending of the gold will involve the broker in trouble and expense; it will also lock up a portion of his capital for awhile. He is, therefore, able to charge more for the bills he sells than a comparison of the money represented seems to justify. Bills upon the foreign country—the right, that is, to receive money in that country—are at a premium. This premium the broker cannot retain for himself; he must share it with those who have sold abroad and who as a result have money to draw abroad. Their credits now sell for more. We perpetuate, indeed, some of the errors of the Mercantilists in our foreign exchange vocabulary. When foreign

credits are at a premium, so that those wishing to pay money abroad must pay more for their bills than the par rate, the exchanges are said to be *against us*, to be *unfavourable*. But, of course, the people with money to draw abroad will by this very fact be favoured. They have, in addition to their ordinary profit, the excess over par at which they can sell their credits. The importing of goods is penalised, the exporting is encouraged. So, when we have more to draw abroad than to pay, the exchanges are said to be *for us*, to be *favourable*. Then it is that importers get a benefit when paying and exporters get less when receiving. The terms themselves are reminiscent of the old Mercantile Theory that considered trade as a struggle among nations as to which should draw to itself the greatest share of the precious metals. Conditions were *favourable* when gold tended to come; conditions were *unfavourable* when gold tended to depart.

Suppose we study a concrete example. We shall then better realise what happens. *M* of Melbourne has sold a consignment of wool to *L* of London. Before its being sent from Melbourne the wool becomes represented by a Bill of Lading; and this enables *M* to obtain payment for the wool five or six weeks before its arrival in London. *M* draws a Bill of Exchange (or draft) upon *L* for the amount, that is, he instructs *L* to pay a definite sum at a definite time; it may be, according to the terms of the bargain, "at sight," or in three months. *M* takes this bill to a Melbourne banker, who, knowing *M* to be a sound man, will buy it. For if *L*, to whom the bill is addressed, does not pay it, *M*, who has drawn the bill, is responsible for the payment. Usually, as an additional safeguard—as a collateral security, he says—the banker will require also the Bills of Lading. The Bill of Lading

Exports pay
for Imports.

gives, as we say, a title to the possession of the goods named in it: whoever has obtained possession of the Bill of Lading in an honest and fair manner is for the time the owner of the goods. The banker sends the draft and the Bill of Lading to his London agent, from whom *L* will be able to obtain the Bill of Lading—enabling him to get the wool—by accepting (undertaking to pay) or by actually paying the bill. The Melbourne banker has now at his disposal credit in London. He is, therefore, in a position to sell bills to any of his customers who, having bought goods—cottons or woollens or machinery—from England, wish to make payments in London. The banker draws upon his London agent and sells the draft to the Australian importer. The Bill of Exchange enables exports to be paid for by imports without entailing any passage of money.

Every export from our country helps, that is, to build up a supply of foreign exchange. Almost invariably an export means an increase in the credit standing abroad of a British bank. Every import, on the other hand, creates a demand for foreign exchange. Almost invariably it means that a British bank will be asked to grant credit abroad. And this is true though the export comes from one country and the import goes to another: exports build up the supply of foreign exchange, imports deplete it. In normal times we buy from the United States an enormous worth of cotton and foodstuffs and goods of all descriptions; we sell far less than we buy. With a country like Brazil matters are very different. We send to Rio Janeiro or to Bahia or to Santos manufactured goods of a far greater value than that of the comparatively small amount of coffee and rubber we buy. Brazil, however, sends a great proportion of her coffee crop to the coffee-drinking States

Adjustment
of Debts.

and imports little in exchange. A merchant in Santos who had bought Manchester goods would have difficulty in finding one who, having exported coffee to England, had a credit on England to sell. He would find numbers who had credit to receive in New York; and this credit would, in all probability, be represented by a bill on England. The New Orleans exporter, who had sent cotton to Liverpool, would have a bill on Liverpool to sell; the New York exporter who had sold wheat to London would have a bill on London. Either bill would be welcome to Brazilians having payments to make in England. The cottons sent to Rio help to pay for the wheat from New York; the coffee sent from Santos pays for the cottons from Liverpool. Our great and far-reaching foreign trade, the long and well-deserved confidence in our bankers, the high reputation of our merchants and manufacturers—these have brought about the curious state of affairs that foreign exchange transactions are usually settled by bills drawn on London. A bill drawn on London is a kind of international currency; and our bankers thereby take toll of the world's trade. The number of payments to be made in London is astonishingly great; these payments are from every part of the world. The holder of a good bill on London is, therefore, sure of a ready purchaser. It comes about, therefore, that London draws few bills but accepts many.

Exports pay for imports we have said; and, allowances being made, this is true. The payments due to a country will in the long run balance payments due from the country whatever those payments are for. For a longer and shorter while, however, a country may have to pay more abroad than it has to receive. This was our state during the War when our workers were diverted from production to destruction,

Invisible
Exports.

or to the production of munitions of war that were exported without return. Then it was that we sent abroad in payment for the necessities of life a vast number of securities, chiefly to the United States. The holders in this country of "dollar securities" were obliged to sell them to the Treasury at fixed prices; and the Treasury sold them in New York in order to prevent the discrepancy between credit abroad and debit abroad from being too great. The securities had entitled people in this country to receive annual payments from the earnings of railways and mines, factories and ships, working abroad. They represented those savings of the nation as a whole which had been invested to exploit the resources of the "new" countries. Shares in undertakings at home, too, went into American possession. For, in these days, when a slip of paper conveys a title to property, we can export our railways and canals, the very houses we build and the fields we cultivate. So it comes about now that, instead of being in the position of having more to receive than to give, we must now, so far as the United States is concerned, produce and export more than we receive unless we wish to become even further in debt.

We had, during and after the war years, strange movements of the Exchanges. A little consideration of these should help us to a better understanding of the nature of the Foreign Exchanges.

The fundamental fact in the foreign exchanges is this:

<p><u>The Essence of</u> <u>Foreign</u> <u>Exchange.</u></p>	<p>obligations are incurred by the inhabitants of one country; these obligations entitle inhabitants of another country to payment.</p>
	<p>We incur foreign obligations in order to satisfy our hunger—we have a big grain bill to pay; in order to gratify our love of elegance—we buy a great deal of silk; in order to provide for a stream of dividends from abroad—</p>

we invest capital in other countries, link up our fortunes with those of enterprises far off. The obligations are measured in money. In other words, payment of money is due abroad. While a country is under an effective gold standard, every obligation incurred—for *merchandise imported, for interest charges to be met abroad, for services rendered by foreigners for money sent or loaned abroad*—constitutes a legal claim on gold. Obligations are measured in gold: if an American performs a service for a dweller in Great Britain, then the American is entitled to take from Great Britain a fixed weight of gold. We are speaking, you note, of places having a "free gold market"—places, that is, in which current money can without delay and without premium be exchanged for gold. Where these exist gold is the medium of exchange. It does not matter that the actual settling medium is paper. So long as a country is both able and willing to settle the balance of its foreign debts in gold, the value of the balance is a legal claim on an equivalent weight of gold. Consider the particular example. There may be in London a great demand for Credit in New York, but a small supply of credit available. That is, there are many bills representing obligations incurred by England to America, but few bills representing obligations incurred by America to England. The obligations do not balance. A balance is due in gold. But as the cost (freight, insurance, interest) of shipping the gold to the creditor country is very small and almost invariable, it follows that the price of foreign bills of exchange (payable in countries known to fulfil their obligations under the gold standard) is almost fixed and practically stationary. The charges incurred in transporting gold across the Atlantic is about a quarter of one per cent. Before the War, the ordinary trader never needed to consider possible fluctuations in the exchanges: during a

continuous period of thirty-three years (1880-1913) the pound sterling varied within the narrow limits of 4.82 and 4.91 dollars (the par value being 4.866). The price can go higher or lower than par to the extent of shipping gold and to that extent only. At one point, *the demand for bills largely exceeding the supply*, it becomes cheaper to export gold: a sovereign will buy fewer dollars in London than in New York, even allowing for cost of shipping. This is the *outgoing gold (or specie) point*. Instead of paying high for dollars in London, the debtor in London sends the actual gold across the Atlantic to be turned into dollars in New York. For, though there may be no market in New York for our goods, we can always get dollars for our gold. Conversely, an American having an obligation to meet in London—needing therefore sovereigns—may find that his dollars will in New York buy fewer sovereigns than usual. *The supply of American bills in London largely exceeds the demand*. More dollars, therefore, are needed to buy sovereigns. Rather than accept the lower exchange rates, the American debtor will turn dollars into gold at New York and send actual gold to London where it will exchange for its equivalent in sovereigns. This is for England the *incoming gold (or specie) point*. While the countries are under an effective gold system the quantity of bills offered matters not at all. The banks create a demand sufficient to absorb any excess however great. There is only a small margin of profit. This is enough, however, to make the banks buy the excess supply, convert it after collection in the debtor country into gold, and upon the arrival of the gold in the home country exchange it again into their own currency. Similarly, there may be a great demand for foreign bills (the banker's customers come to him for drafts to cancel their obligations abroad). The banker draws the draft

needed, finds perhaps that he has few bills to send for covering the drafts; and is constrained to send gold to be placed to his credit in the equivalent foreign currency. There may be no market abroad for our cottons or iron goods. But gold need not be sold: it has merely to be coined. All this is true, however, only as long as the currencies are upon a gold basis; when the gold basis has been forsaken other conditions arise. The being on an effective gold basis implies that a holder of any of the various representatives of money—cheque, bank notes, bills—may without difficulty obtain gold if he wishes instead of gold's representative. In England a five pound Bank of England note can be exchanged at the Bank for five sovereigns; in the U.S.A. a dollar bill may be exchanged at any of the Assay Offices for a definite weight of gold. The gold-points, that is, are such rates of exchange as make it profitable to buy gold in one country and sell it in another. In the early months of the War so much money was due from the United States to this country, so many securities had been sold for Britishers on the New York Exchange, that gold in great quantity was sent from the States. It went, indeed, not to London but to Ottawa, where the Bank of England had established a depository. The increasing payments due to the United States quickly reversed the current, however; and gold flowed from all directions into New York.

From a commercial standpoint there is a gold par of more definite use than the Mint par,
 Gold Par. ~~usually found in text-books.~~ usually found in text-books. The latter is of academic interest, but it is not of practical utility. Take, for instance, the relation between the sovereign and the 20 franc gold piece. The sovereign is minted at 77/10½ per ounce standard, and the franc at 3,100 francs per kilo, .900 fine. Hence by a simple arithmetical calculation we

find that the Mint par of the sovereign is 25·2215 francs. This is the Mint par, a deduction from the Coinage Laws and unalterable so long as the Coinage Laws remain unaltered. The calculation may be useful to fix a theoretical point; but as a guide to exchange operations between the two countries it is irrelevant. The real par corresponds to the theoretical (Mint) par only when the actual currency is that laid down by law; and when the actual weight of gold taken to the Mint is given out again (as with us) in coin. But as a general rule sovereigns of average weight only (say 3 mille—·3 per cent.—light) can be obtained for export; and when sent into the French Mint a seigniorage of 6·70 francs per kilo (say $2\frac{1}{8}$ mille) is charged. Thus actual conversion of sovereigns into gold francs would produce probably only 25·0927 francs per sovereign. Conversely, when gold francs are melted the amount charged as seigniorage necessarily disappears. For whenever a seigniorage is exacted, the gold on being exported loses part of the value it had at home.

The New York banker who needs to export gold can usually obtain it in bars from the Assay Office at a charge of $\frac{1}{25}$ per cent. His advantage from this is that he receives full weight, not gold coins lightened by abrasion; and the Government can afford to give bars because the cost of coining is saved.

Since 1914 we have given up (temporarily, not permanently) the gold standard: a "pound" is not now a definite weight of gold, but a fluctuating purchasing power having an uncertain connection with gold. And other European currencies have seemingly severed the connection altogether; the old names persist, the realities implied by franc, mark, lire, florin, rouble, are quite different. The table of the various currencies on page

Present
Position in
Regard to
Gold.

241 gives in a summary manner the quite extraordinary state of affairs in Europe during 1921. Foreign Exchange is now not a relation between currencies, but between purchasing powers (represented by goods not by gold). The holder of a foreign bill offers now to the prospective buyer a title, *not to a definite amount of gold, but to an amount of paper currency*; for the redemption of which no date is set, no provision made. The owner of a "pound" in London wishes to know nowadays what correspondence the *goods* he can buy in London have with the *goods* a franc can buy in Paris. That gives a basis of comparison. Formerly the Coinage Laws of the countries concerned—or rather the actual state of the currency, which usually deviated from the legal requirements—supplied the means of comparison. Now a more elaborate calculation must be made. Index Numbers have obtained a new importance. Consciously or unconsciously the holders and buyers of foreign bills assess the value of those bills in accordance with the *prices* ruling in the countries concerned.

How was it that the gold standard came to be given up?

The
Relinquishing
of the Gold
Standard.

In other words, what constrained the peoples of Europe to lose hold on the firm basis of gold, on which trade and industry had long proceeded smoothly, and adopt a system altogether unintelligible to the ordinary

man?

The free flow of gold was prevented by the belligerent European nations, including ourselves. For, so great a volume of obligations had been contracted, with America particularly, and so small was the volume of counter benefits conferred, that the gold would have disappeared, not from circulation merely, but from the country. In Europe there was an enormous *demand* for dollars because of:—

(i) Immense purchases of foodstuffs, munitions, and war materials;

(ii) Large remittances to America by frightened capitalists and by speculators;

(iii) The freights earned by the young American Merchant Service.

There was a far less *supply* of dollars than usual because:—

(i) Europe was producing far less, and found increasing difficulty in transporting the little she produced;

(ii) America used less for "invisible items" like insurance and freights, and the expenditure of Americans abroad.

A great and increasing debit balance arose against Europe. This debit balance was represented by an excess of bills payable over bills receivable. The banks no longer could absorb the excess; for the restriction on the sale and export of gold prevented the former machinery from working. Gold was not available; and the depreciated paper became worth ever fewer and fewer dollars.

It is curious to note that Sweden and Norway, during the War, were constrained to place an embargo, not upon the *export*, but upon the *import* of gold; and Spain bought gold at a discount. There was so great a danger of an extraordinary and unsettling rise of prices through the flooding of the country with gold from the belligerent countries that it seemed desirable to discourage the import. In America (U.S.A.) itself there has been *inflation* (an increase in means of purchasing without a corresponding increase in commodities), not because there has been a departure from the gold standard, but because of the increase in gold. Here are interesting figures bearing on the point:—

Figures for January, 1921, showing the relation between price levels and the Exchanges. (Merchandise not gold has virtually become the means of settling international obligations.)

Jan., 1921.			
Index Numbers issued by the U.S.A. Labour Bureau.	Index Numbers compiled by <i>The Statist</i>	Percentage premium on a dollar's worth of goods in England.	What the exchange should have been if it had corresponded to the relative level of prices.
(1913 prices = 100) U.S.A.	(1913 prices = 100) Great Britain.	$\frac{232 - 177}{177} \times 100$ = 31%	3.70
177	232		
Exchange.	Actual average monthly rate (cable). 3.73.	Percentage premium in dollar currency 30	Percentage of over-valuation of the £. 1

(Upon the price levels basis, that is, the exchange for January, 1921, was on the average slightly in our favour.)

Since the easy and stable relation among the currencies, when those currencies were based on gold, no longer holds, the buyer of a Bill of Exchange must nowadays ask himself not one, but a series of questions rendering exchange operations no longer a matter of routine, but of complicated problems. It is not simply *How much gold will this enable me to get?* but *How much merchandise will this buy at the moment in the country on which it is drawn? What are the present economic and political conditions of the country whose currency is offered, and what are its future prospects? Are these conditions such as to make it reasonably certain that I shall be able to re-sell at a profit or to obtain settlement ultimately in gold or goods or services?*

A country may create a number of claims upon foreign holders of purchasing power in much the same manner as a merchant temporarily embarrassed may create purchasing power for himself. If the latter can persuade a banker that the security offered is sound, and that there is a reasonable prospect of gain, he obtains an overdraft; he has a sum placed to his credit and may operate upon it by cheque. Similarly a country may, while its credit is good and there is a reasonable hope that it will at some future date meet its liabilities, and till it does pay interest charges, float a foreign loan. That is, investors in countries abroad are invited to remit to the borrowing country part of their claims on the community at large, claims attested by their possession of money. The obligations incurred by the investors who respond to the invitation have a counter-effect to obligations incurred by the borrowing country (for its imports perhaps).

The questions an investor will ask and upon the answers to which the success or failure of the loan will depend are:—

(i) What productive capacity has this nation? (largely a matter of geography).

(ii) How much can it save a year, what excess of production has it over consumption, to meet its foreign obligation?

(iii) To what extent will its people submit by taxation to give up this excess?—a question clearly depending upon political conditions; a stable government like that of France could command a loan where a seemingly unstable one like that of Russia could not.

Raising a loan abroad means the export of a *paper obligation*—"a long term foreign bill of exchange." But there is a limit to the acceptance abroad of such bills, and ap-

parently the limit has been reached in regard to some countries. The curious position is thus reached.

Producers, in America especially, where the output of the factories for the twelve months ending June 30, 1920, was estimated at 50 million dollars or about 40 per cent. of the world's total production, *are eager to sell*. The producers are mainly creditors of those to whom they would sell; and they are eager to strengthen the financial standing of their debtors.

Consumers, in Central Europe particularly, *are eager to buy*, not only for consumption but in order to pay existing debts. The producers are exceedingly anxious to improve the financial standing of their debtors; but additional security is looked for, and in the unsettled state of affairs, additional security is not forthcoming.

Yet there is not wanting weighty opinion that a way out of the *impasse* is possible by further extension of credit. The Chairman of Barclay's declared to the Parliamentary Commercial Committee of the House of Commons: "Assistance given at the present time to the distressed countries of Europe would secure commercial and political ties of immense value in the future, and the inability to give it would mean a great opportunity lost."

A clear knowledge of the causes that have created so great a confusion in the Foreign Exchanges should point to the remedy for that confusion. We are not justified in anticipating that the recovery will be other than a gradual and long drawn out process. For the disturbance has been the inevitable result of the immense dislocation produced by the world-shaking War. The fundamental reforms are stated in the Report of the Brussels Financial Conference: "Restoration of order in public finances,

Remedies
for the
Confusion.

- purging of currencies; and freedom of commercial transactions."

In regard to the first, the trading nations seeking foreign credits will need to balance their budgets, to make their incomings at least equal to their outgoings. Possible lenders will then have some confidence in the ultimate repayment of their loans and in the present payment of interest. The European nations will be able to obtain the raw materials and other products needed from America or elsewhere by way of long term investments or credits. The amount of work executed upon the materials will be more than adequate to pay interest and to supply a moderate sinking fund, even after the debtor countries have supplied their internal needs. For efficiency and industry are still the distinctive traits of the European worker, and—in spite of many gainsayers—particularly of the British worker. It comes to this: during the War years we consumed a vast amount of commodities in which were embodied the services of men abroad; and we were so intensely occupied by the War that we supplied but a small amount of services in return. Now that peace is here, the process must be reversed; we ourselves, France, Italy, Germany, Austria, to a far greater extent, must give more services than we receive. We shall thereby be paying off part of our foreign debts. Germany, for instance, obtains the proceeds of a loan from the United States in the form of cotton. The loan is paid off, in the event, by manufactured cottons, bought either by the United States or some other solvent buyer. These cottons are sold at a price that includes *cost of the raw material, wages of labour, overhead charges, interest on the loan and a portion for sinking fund, taxes, and a profit*. Thus in a manner the creditor country purchasing the manufactured

article pays itself the interest and sinking fund ; and the question may arise whether it is not better to cancel the original debt, so that there will be no need *firstly* to make new loans of raw materials, *secondly*, in order to recover the amount of the old and new loans, to absorb immense quantities of foreign manufactured articles. This, at all events, is how it appeals to our own manufacturers and possibly to those of the United States.

There can be no restoration of international confidence —and with it stability in foreign exchange
Purging of Currencies. —while a government may at its fiat depreciate its currency. A British investor having, before 1914, invested in obligations payable in French currency obtains to-day interest in depreciated paper money. He has a less income; and in the event of his selling he suffers a heavy loss of capital. It is asserted, indeed, that the more a country increases its foreign loans, the more is it tempted to inflate its currency. A British investor lends 10,000 francs in France when francs are at 25 to the sovereign; it is an advantage to the Frenchman if payment is made when francs are 50 to the sovereign. He pays to the Englishman only half the amount of *goods* he received. We are reminded of Mill's indignant comment. Speaking of the Government monopoly of coining he declares: "Governments found it their interest to take the operation into their own hands, and to interdict all coining by private persons; indeed, their guarantee was often the only one which would have been relied on, a reliance, however, which very often it ill-deserved; profligate governments having until a very modern period seldom scrupled, for the sake of robbing their creditors, to confer on all other debtors a licence to rob theirs, by the shallow and impudent artifice of lowering the standard; that least covert of all modes of knavery,

which consists in calling a shilling a pound, that a debt of a hundred pounds may be cancelled by the payment of a hundred shillings. It would have been as simple a plan, and would have answered the purpose as well, to have enacted that 'a hundred' should always be interpreted to mean five, which would have effected the same reduction in all pecuniary contracts, and would not have been at all more shameless. Such strokes of policy have not wholly ceased to be recommended, but they have ceased to be practised; except occasionally through the medium of paper money, in which case the character of the transaction, from the greater obscurity of the subject, is a little less barefaced."

During the War, and for some time after it, government printing presses were hard at work to provide the "money" which taxes or loans failed to provide; and the flood of government paper drove up nominal prices and nominal wages to grotesque levels in some countries. Russian wages, reckoned in thousands where they used to be reckoned in tens, have been of no benefit to the worker, because prices have come to be reckoned in their thousands too. By issuing paper, Government in fact levied a forced loan on the community. It bought the goods it wanted with paper; these goods were dissipated in war so that everybody was so much the worse off; and the extra paper in circulation drove up the prices of the remaining goods. One of the little pamphlets published by the Ministry of Reconstruction is genially frank about the matter: "You can pay for a war either by increased productive activity or by rigid economy in consumption. You can throw a burden of interest on posterity; but you cannot make posterity provide the shot and shell, the corn and cotton that you want. If you cannot increase your production or diminish your civilian consumption sufficiently to meet your war

needs, posterity cannot see you through. Now, of course, in this country production has been increased enormously. And economy in consumption has been practised to some extent. But no one believes that the whole military requirements of the country have been met by the added exertion of the munition workers plus the voluntary self-denial of the general public, denying itself that it may buy war loan. A great deal of the self-denial of the public has been involuntary, not deliberate, due to high prices, not to patriotic enthusiasm for the buying of war loan. In fact, there has been something rather like a forced loan because there was not enough real saving. The Government, it is true, has not flooded us with paper. The currency notes at first merely replaced the sovereigns. There are now far more of them in circulation than ever there were sovereigns, but the excess is not really outrageous. What the Government did was to connive at the creation of additional bank credits, which have much the same effect as note issues. People found that their banks would help to take up war loan when they had not really enough money saved for the purpose. They bought war loan and the Government secured purchasing power, just as if it had made more notes. With its purchasing power it came into the market to buy goods and labour, and it was prepared to pay for them. Up went prices and wages, and when the private person wanted labour or the goods, they were not to be had at the old rates. He paid the new rates against his will. If people had been prepared to deny themselves enough, or if the Government had pushed taxes high enough in the early days of the War, it might not have been necessary. But this is how things have worked out."

There would appear to be some prospect in Great Britain of returning to the gold basis; for the depreciation of the

currency is not excessively great. Deflation even here is possible, however, only by a deliberate policy and by a willingness to sacrifice. There must be reduced expenditure, adequate bank rates, lessened imports that mean a call for gold, and above all increased production. More drastic measures are needed in other European countries. There, may, for instance, be necessary a writing down of the face value of a note, a decreeing that a five franc note shall be a two franc note. This would mean a virtual declaration of insolvency on the part of the state (the community), a request to its creditors (the holders of the notes) to accept a composition. And it would entail a corresponding writing down of bank deposits, of all legal instruments of payment, of all internal contracts of whatever nature.

How soon mobility among commercial peoples will be established is impossible to say. The close of the Napoleonic War is the one great parallel afforded by history to the conditions at the close of the War of 1914-18; and certain important differences prevent our direct arguing from one to the other. In 1815 the world was still agricultural; Britain alone had introduced the industrial system, and depending as she did more on the fluctuating basis of trade than on the stable basis of farming, had suffered more than the other belligerents. Other countries were largely self-sufficing; and in periods of depression they had emigration to undeveloped regions, North America in particular, as a resource. Now all countries and continents are inter-dependent to an astonishing extent; and each is interested in the well-being of every other. Credit in 1815 was hardly developed abroad; and lending to foreigners was a function of Britain alone. There is this factor in favour of our time, however, that the enormous power acquired by man over natural forces has vastly increased

Freedom of
Commercial
Transactions.

the possibility of a rapid recovery in every direction.

We need only contrast the simplicity of the *single gold basis* with the complexity of *relative purchasing power* in order to assure ourselves of the overwhelming superiority, to the business man and to the whole community, of the former.

APPENDIX I.

REGULATION OF NOTE ISSUE: A COMPARISON.

Our system of ensuring that Bank of England notes shall always be convertible into gold is that of rigid limitation with, however, a reserved power to exceed the limitation. The reserved power is available only in times of extreme monetary stress; the Government must acquiesce in the necessity, and steps must be taken to make the excess a merely temporary one. We have a *fixed issue*, the amount of which is always below the amount of notes in the hands of the public; beyond this fixed issue each note is a *gold certificate*. We cannot, you note, distinguish between the "covered note"—the gold certificate—and the "uncovered note"—which forms part of the fiduciary issue. In other words when we obtain a £5 note we cannot assign it to the £18,450,000 that may be issued uncovered, or to the notes backed by gold. When, therefore, the emergency comes, the uncovered notes can be increased without friction.

Before 1844, the Bank authorities had absolute discretion in the issue of notes; no limit was fixed, no reserve of gold was stipulated. As a result of the Act, there is a gold

reserve of ascertainable amount. This reserve figures in the Weekly Account as *Coin and Notes* in the Banking Department, the notes being exchangeable at any moment for gold from the Issue Department.

On ordinary occasions, that is, the Banking Reserve consists of the amount of note issue authorised by the Bank Act, less the amount already issued. It is the unexercised right of issue. On extraordinary occasions this reserve may be supplemented by a further issue of uncovered notes or by the gold held as a cover. The additional uncovered notes would satisfy a domestic demand: the gold would be touched only for a foreign drain. In 1847, 1857, and 1866, the Bank was empowered to call upon this ultimate resource; and in 1857 there was actually such a call for further notes. We are asked to think that the very elaborate ceremony, the solemnity of asking for permission to break the law, imposes on the Bank Governors a keen desire to keep within the limits assigned.

Our note issue may be looked upon as **rigid**, that of France and of Germany is in practice **elastic**.

We may say that our note issue is managed on the Currency Principle. The note issue of France and Germany may be regarded as managed on the Banking Principle. The Bank of France is, indeed, subject to a maximum issue; but this maximum is purely nominal, and when actual issues have even distantly approached it, the maximum has been raised. The actual government control in France makes the process a very easy one. Again, when in 1873 the German Reichsbank was formed, the English system was ostensibly adopted: there was a fixed fiduciary issue, and an unlimited issue against gold. Avoiding, however, our round-about way of obtaining legislative sanction for further issue uncovered by gold, the German system allows an

An Elastic
Issue.

additional issue on payment of a tax of 5 per cent. The permission was, particularly during the years immediately preceding 1914, in fact often used; so that both France and Germany issued notes at the discretion of the bank directors. In the United States, too, extra notes may be issued, a tax being paid on the excess.

There is in the United States, however, not a fixed issue, but a fixed proportion to the gold and silver held. The Federal Reserve Act requires the Federal Reserve Banks to hold 40 per cent. of lawful money against their note issues.

If the reserve should fall below 40 per cent. the tax is charged; and the design is to make the issue automatic rather than at the discretion of the bankers. One per cent. is charged if the proportion remains above $32\frac{1}{2}$ per cent.; after that point $1\frac{1}{2}$ per cent. is levied in each $2\frac{1}{2}$ per cent. of the deficiency.

The *Federal Reserve Act* of 1913 was designed to change the decentralised system of independent banks into a centralised system. It adapted our one reserve system to the conditions of the United States. There is not a single central bank, but all the banks are subject to a central control; and each Federal Reserve bank is alone in its district. It is, therefore, possible to provide credit when the community requires it; it is easier to prevent an expansion of credit that might lead to a financial crisis. By concerted action a machinery similar to our Bank Discount Rate could control credit.

The Act divided the area of the United States into twelve districts; in each district an important town being selected as the Federal Reserve City. That for No. 12 District, for instance, is San Francisco; and there are branches at Spokane, Portland, Seattle, and Salt Lake City.

There is a Federal Reserve Board of seven members.

Of these the Secretary of the Treasury is Chairman, and he has as a colleague the Comptroller of Currency. In this matter, therefore, there is an imitation of the French system of giving the Government a controlling influence. Five others are appointed by the President (with the consent of the Senate) to serve ten years. These five give their whole time to the work of the Board, and receive a salary of \$12,000 each.

Just as, with us, the great Joint Stock Banks deposit part of their reserves with the Bank of England, so in the United States each National Bank is required to keep a reserve of fixed proportion to its liabilities with the Federal Reserve Bank. The banks in Central Reserve Cities (New York, Chicago and St Louis) must make this reserve 13 per cent. of demand deposits (which are defined as those payable within thirty days), and 3 per cent. of other deposits (subject to not less than 30 days' notice). For banks in Reserve Cities the percentages are 10 and 3; for other banks, 7 and 3. The method of maintaining the required proportion is that of rediscounting bills with the Federal Reserve Bank. We seem to manage very well without decreeing these mechanical limitations. We may, indeed, with some justification, say that our banking traditions come down to us from the merchants of the City of London, who have mostly by force of arms or by the withdrawal of pecuniary help, been able to protect themselves against interference. Hence perhaps some of the merits of our banking system. Legislation asks for uniformity; it is the essence of a great banking system to be able to adapt itself to unforeseen conditions—not rigidity but flexibility is needed.

The new banks are not intended as profit making concerns, and their dividends are limited so that a big reserve may be built up.

Six per cent. cumulative dividends shall be paid from earnings after expenses are met. *Net earnings remaining shall be paid into surplus up to 100 per cent. of subscribed capital stock, and therefore 10 per cent. shall be paid into surplus, the remainder being paid to the U.S. as a franchise tax to be applied to gold reserve or to retiring outstanding U.S. bonds.*

The Bank must maintain reserves in gold or lawful money of at least 35 per cent. of its deposits, in addition to reserves against notes.

A most interesting application of the same principle, a central and controlling bank not run—like
 The South African Plan. the commercial banks—mainly for profit is the *South African Reserve Bank*. This was founded by the (South African) Currency and Banking Act of 1920. We may summarise much of the theory of banking by considering this Act. There was, before the Act, no real banking organisation; banks had grown up haphazard; reserves were scattered, each bank in times of stress fighting for its own hand. No bank could hope for anything except from its own reserve. For we have learnt that overdrafts and loans to the Stock Exchange cannot, in times of acute stringency, be a reserve. To call in loans when traders are anxious simply precipitates a crisis. Even solvent traders are forced to sell; and every sale further depresses prices in an already falling market. Commercial bills without a discount market, without a central bank willing and able to advance on good paper, are locked up till maturity. A central bank was most desirable not only to finance trade in time of need, but to control the discount rate. The American crisis of 1907, one of the worst recorded, taught the United States this, and made the Federal Reserve Act inevitable. A central bank was no less desirable for the regulating of the note

issue. The Act gives a monopoly of issue to the newly constituted bank. Before, the commercial banks had possessed the right under varying conditions—in the Cape Province all notes had to be covered by Government securities, at their par value, the notes being legal tender and redeemable in gold; in the Transvaal and Orange Free State one-third of the amount of notes had to be held in coin, and the total issue was limited to the paid-up capital of the bank.

Clearly, a number of note-issuing banks, without a responsible body to control issues, makes a uniform policy impossible. And control, guided by sound and detached judgment, is essential for the regulating of the mechanism of credit. The detached judgment can be exercised only by a public institution not concerned with every day business and not mainly run for profit. A commercial banker, whose main aim is to make profits and increase business, could hardly be expected to exercise such judgment.

The bank is not, any more than the Bank of England, a Government bank. It is a private institution with a capital of a million, half subscribed by the banks within the Union, half by the public. The Governor and Deputy-Governor, however, are appointed by the Governor-General, and three of the other nine members on the Board are Government nominees. In this, you note, it is something like the *Banque de France*, the two State Governors of which are, if necessity arises, able to dictate the policy to be adopted.

The business of a central bank is not primarily for profit. Profit should be subordinated to the duty of upholding the credit of the country, and of preparing for helpful intervention in a crisis. Just as in the American system, therefore, any profit made goes, after a moderate dividend has been paid, to build up a reserve fund.

The paper discounted must be the best commercial paper, bearing at least two good signatures; and a rate is to be published from time to time. The bank is definitely prohibited from making long term loans, from locking up its assets in "fixed" capital.

The note issue, of which a monopoly is conferred, must be secured to an amount of not less than 40 per cent. in gold coin or bullion. The Treasury may, however, as with us, relax the requirement as to reserve.

It must also keep a metallic reserve in gold or specie of 40 per cent. of its deposits and bills payable. The provisions governing the relations with the other banks are very similar to those of the United States Federal Reserve Act.

France supplies a most striking instance of a centralised system. The Banque de France is the great central bank; it holds the one gold reserve; it has the monopoly of note issue; it deals with the other banks rather than with the people, and stands ready at any time to rediscount paper already discounted by the banks; it is closely allied with the State—the Executive Government appoints the Governor and Deputy-Governor; and these, appointed to watch over the national interest, may disregard the opinions of the *régents*, the directors named by the shareholders. It is far more a department of State than the Bank of England is; it is never suggested among us that the conduct and management of the Bank should be matters of party politics. A drawback to the Banque de France, from the point of view of international finance, is that it is not required to meet its obligations unconditionally in gold. In consonance with the unlimited legal tender privilege of five franc pieces, it has the option of paying silver.

Dealing directly with the people are the great private
B. C.

banks of Paris having branches scattered over France and abroad. The chief are the *Crédit Lyonnais* (*Lyonski Kredit* is a well-known name throughout Eastern Europe); the *Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France* (a name shortened in practice, as one might expect, to *Société Générale*), the *Comptoir d'Escompte*; and the *Crédit Industriel*. These, we are told, work in close harmony, and have become a huge "money trust." Further, there are for the convenience of the small saver, who is so much of a power in France, local savings banks (*caisses d'épargne ordinaires*). But these are not free to make their own investments. The savings are handed over to a State institution, *La Caisse des Dépôts et Consignations*; and this makes the investments, mainly in *rentes*, in government stock. The *Crédit Foncier* was, as its name implies, designed to lend upon land mortgages. It does, in fact, do a great mortgage business but in the cities: French land is not heavily mortgaged, and what mortgages there exist are taken by private investors.

APPENDIX II.

CREDIT CYCLES.

The man that lived to himself had little need to trouble about what occurred in lands across the sea. To him the season's difference, the prospect of plenty or the dread of dearth, was the one thing that mattered. Even so, he was not free from ups and downs, from the alternation of prosperity and poverty that many regard as a late birth in time, as a result of the close dependence of man upon man. In primitive times themselves, in the hunting and fishing stages even, there must have been the constant interchanging between superfluity and scarcity. As soon as men reasoned about the life they lived, the causes of the succession were sought; we may take it that when Joseph's seven years of plenty were followed by seven years of famine, when the seven lean kine ate up the seven fat kine, many an explanation was forthcoming. Bacon has a curious essay, "Of Vicissitudes of Things," in which he discusses the mutations in the world. In it he has a tentative explanation of changes that had already been noted: "There is a toy which I have heard, and I would not have it given over, but waited upon a little. They say it is observed in the Low Countries (I know not in

what part) that every five and thirty years the same kind and suit of years and weathers come again; as great frosts, great wet, great drought, warm winters, summers with little heat, and the like; and they call it the *prime*. It is a thing I do the rather mention, because, computing backwards, I have found some concurrence." Later investigators have sought to establish a ten years' recurrence of similar conditions. In a decade the wheel would have come full circle. We should have passed through a period of expansion when prices and profits were high, when work was plentiful and wages good, when interest was high and bank reserves low. The boom, when everyone seemed to be making his fortune, would have been succeeded by a slump, a period of depression, when prices were falling, profits were low, unemployment was rife, wages and interest low, and bank reserves—signifying the destruction of part of the country's credit—rising. "There is," says Mill, "a commercial crisis when a great number of merchants and traders at once either have or apprehend they shall have a difficulty in meeting their engagements." In other words credit, on which they have come to depend, has broken down; there follows pressure on the banks, and a financial panic occurs. The question whether such are inevitable companions of our modern productive system is a question of much practical importance.

Definite periods of time are, we might anticipate, hardly applicable. In these days of mass production, conditions change with astonishing rapidity; a great shortage of one commodity, when its producers are making exorbitant profits, is succeeded by a great glut, when the goods produced cannot be sold at prices that will enable the producer to continue. And this may occur in much less than ten years. High prices obtainable for motor cars, for instance,

Definite
Periods not
applicable.

point out to the makers that the market is far from being satisfied. It is clear that, at present prices, profits will continue high; and the optimistic trader sees no reason why they should fall. In 1919 and 1920 it seemed as though the occupation that all traders coveted was that of a motor car dealer. Here was the money making business; and firms the world over worked vigorously to supply the unsatisfied demand. Plants were increased; more workers were engaged; firm strove against firm to capture the profits to be made. So many cars were put upon the market that remunerative prices could not be obtained. The boom had become a slump in 1922. For we must note this about our modern units of production,—about the “firms,” that is, which supply the market. Each firm works with little reference to others. Within the firm there is an effective and beneficial organisation; workers are appointed to do what they are best fitted to do; the output of one set of workers is adjusted to that of another set—the number of watch cases will be in proportion to the number of watch glasses; in a well-organised boot factory the “uppers” will not be more numerous than the soles to which they will be attached. Outside the firm, we are not, indeed, justified in saying there is chaos and confusion; there is at all events a great deal of working in the dark. Firm *A* does not know how effective an answer Firm *B* is going to make to the increased market demand; Firm *A* in fact hardly considers what effort Firm *B* is making. The one big fact in its consideration is the exceptional market. There is the eagerly awaited chance of great profits, and it borrows largely in order to increase its output. And borrowing is easy. For merchants have given lavish orders at remunerative prices; and the banker willingly transforms the debt due from the merchant into present purchasing

power. Ever more and more is put on the market. When a thousand and one firms are doing this, no wonder a difficulty in disposing occurs. Prices break, credits are contracted, and in some instances manufacturers and traders—disappointed in their anticipations—are unable to meet their obligations. Their debts have overtaken and exceeded their assets. And so closely knit is the business world nowadays that difficulty and depression in any one considerable branch has its effect upon the whole. Business men nowadays can pay their way only when they can collect the debts due to themselves. The banking system binds all together, and if a man cannot collect what is due to him he cannot pay what is due from him to others.

If the break of prices is sharp we have the painful phenomenon of what, looked at from various points of view, is called a commercial crisis or a financial panic, or a trade depression. The burden of all debts grows: we have bankruptcies and unemployment and distress. The causes of such and the possible remedies are sufficiently important topics to call for close attention. Are we to attribute the fits and starts, the boom and the slump and the quiescence, to the weather? Do we agree with Professor Jevons when he connects *The Sun's Heat and Trade Activity*? Certainly a year that gives bumper crops, when the land smiles and winter seems far away, is a year that creates optimism among men, among business men as among farmers. In Pippa's song, you remember, "The year's at the spring, And day's at the morn, Morning's at seven, The hill-side's dew pearled, The lark's on the wing, The snail's on the thorn"; and the conclusion reached is "God's in his heaven, All's right with the world." Now is the eagerly anticipated time of big profits.

Business
and the
Weather.

A wave of optimism goes over the world of business, too; enterprises that promise great profits are eagerly taken up; bankers willingly grant credits. And the optimism creates meat to feed on. People who have bought find that prices have risen; those who have obtained credits can increase their credits because the value of securities has gone up. The Bank's Reserve becomes diminished. In other words, the ratio of Cash and Notes in its Banking Department to the Public and Other Deposits is lower. For the expansion of credit, forcing up prices, brings in its train a demand for more legal tender currency: the banks demand it in order to maintain their normal proportion of cash to liabilities; the general public demands it for payment of wages and for retail transactions. There would be a domestic drain on the reserve. Not that gold need, as for a foreign drain, leave the Bank; notes are as good for internal circulation as gold. None the less the notes could be obtained from the Issue Department only by the transferring of gold to that department. And when five pounds is the lowest denomination of note, gold coin is sought and the reserve diminishes. A foreign drain, too, is as a rule coincident with a domestic drain. For the rise in prices makes the country a good market to sell in, a bad market to buy from. Gold, the price of which is fixed, alone retains its former value and is sought in lieu of goods. The gold reserve tends to be depleted.

The Bank of England raises its rate of discount. The raising of the Bank rate is a danger signal. The outer banks raise their rates, and grant credits on more onerous terms. New enterprises must be deferred. There is a lessened demand for building materials, for machinery, and for other capital

A Contraction
of Credit.

goods; the slackening of employment lessens the demand for consumptive goods also. Those who have bought stocks on credit, having greater interest charges to meet, perhaps even finding it difficult to recover their loans, press their goods on a falling market. There might ensue a depression as little reasonable as the previous boom—a dull and dreary November after a glorious August. We can hardly say, however, that the weather and the harvests are the invariable cause of credit cycles. We cannot even say that, from the profit point of view, an exuberant harvest is better than a niggardly return from the fields—a farmer may get more for a scanty crop than for an abundant one. Examine an instance or two of these difficult periods we call financial crises.

Think of the first financial crisis that happened after the Bank Charter Act of 1844, the crisis that made evident wherein the virtue of the Act lay.

There had in the period preceding 1847 been an exceptional locking up of capital in railway construction; there was much less readily available purchasing power. The wealth of which people were possessed had lost much of its liquidity. In this state of things a comparatively slight shock to the Money Market might cause such a loss of confidence that a crisis is caused. The slight shock came. For, in their manner, the merchant being ever prone to optimism, Liverpool Corn Importers based their orders abroad upon the prices and profits realised during the potato famine year of 1846. But 1847 was a year of bountiful harvest. The too optimistic merchants failed to sell the corn at the anticipated prices; their bankruptcy made the position of the banks difficult, and several in Liverpool and Manchester suspended payment. Commercial paper became

The Crisis
of 1847.

discredited throughout the business community, and pressure arose upon the store of legal money; in other words, upon the reserve of the Bank of England. The Bank Governors met their difficulties in the manner, that has now become traditional. The Bank Rate was raised to 8 per cent., but at that rate ample advances were made on all manner of securities; permission to exceed the statutory issue was obtained from the Government; and the knowledge that lawful means of payment could still be had calmed the storm. We live, you note, under a system of credit rather than of gold; the money of the Market is



If the superstructure is cut down there must, to liquidate indebtedness, be an increase in what the law recognises as lawful means of cancelling debts, in gold or in the paper that is acceptable by the community in lieu of gold.

The Bank was called upon to do what the Governor declared it did do to meet the crisis of 1866:

The Bank's Policy in 1866.

"When the storm came upon us, on the morning on which it became known that the house of Overend, Gurney & Co. had failed, we were in as sound and healthy a position as any banking establishment could hold, and on that day and throughout the succeeding week we made advances which would hardly be credited. It was not unnatural that in this state of things a certain degree of alarm should have taken possession of the public mind, and that those who required accommodation from the Bank should have gone to the Chancellor of the Exchequer and requested the Government to empower us to issue notes beyond the statutory amount, if we should think that such a measure was desirable. But we had to act before we could receive any such power; and before the Chancellor of the Exchequer was perhaps out of his bed we had advanced one-half

of our reserves, which were certainly thus reduced to an amount which we could not witness without regret. But we could not flinch from the duty which we conceived was imposed upon us of supporting the banking community; and I am not aware that any legitimate application made for assistance to this house was refused. Every gentleman who came here with adequate security was liberally dealt with; and if accommodation could not be afforded to the full extent which was demanded, no one who offered proper security failed to obtain relief from this house." In other words, the Bank enabled all who were solvent to obtain present means of payment without being forced to realise their property in a falling market. The fall of prices due to the contraction of credit was not, therefore, the steeper by reason of obligatory sales at ruinous prices.

The Act of 1844, you remember, had been designed to make Bank Notes—beyond a fixed and low limit—merely certificates indicating that gold to the specified amount was in the Issue Department. In 1847, three years after the passing of the Act, the urgent needs for legal tender money obliged the Governors of the Bank to ask, and the Government to grant, permission to exceed the limit fixed. The permission was not used; during the several "suspensions of the Bank Act," the legal limit has, in fact, been exceeded only in 1857. But it meant that the store of gold accumulated in the Issue Department could, if need be, supplement the currency. The Act did not, as was hoped in some quarters, obviate monetary difficulties; it did make certain that adequate means of countering the difficulties shall not be wanting. The Act ensures that gold will be available whenever extreme necessity calls for the gold. Certainly it is a paradox that the merit of the Act becomes evident only by

The Merit of
the Bank
Charter Act.

breaking or suspending the Act. Peel himself acknowledged that this was so. A stock of gold was accumulated and preserved. It is available for use only on an extraordinary occasion ; and the Bank Governors must satisfy the Government of the day, and in the event Parliament itself, that the occasion is extraordinary. The ostensible reason for the Act is not, therefore, the real reason ; the gold reserve is not so much to ensure convertibility of notes as to enable the State, through its agent the Bank, to exercise its sovereign right of creating legal money. It enables the Bank to do what experience has shown to be the one way of calming a panic, and of causing the business life of a community to resume an unruffled course. It prevents any really solvent debtor—who has, however, not immediately available resources—from becoming bankrupt. At a time when men fear that they will, through no fault of their own, but simply through the inability of others to pay debts, be unable to meet their engagements, then whatever bank keeps the banking reserve of the country is called upon to lend that reserve freely. Whoever has acceptable evidence that he is solvent should be helped to avoid bankruptcy : the bank's advances must be a temporary substitute till the frozen stream of credits and debits becomes thawed and there is no longer need of the added legal money. A holder of heavy stocks should not, for instance, be obliged to sell in a falling market and thereby still further depress prices ; and an advance refused is pretty sure to mean such a sale. Certainly the advances should be made on what, in ordinary times, would be regarded as onerous terms : the bank rate should be sufficiently high to be a deterrent to any except those who really need the advance. So long as the Government, and its creature the Bank, retain the confidence of the business community, a domestic demand for legal tender

can be met in a comparatively easy manner. The difficulty comes when a foreign demand—to be met by gold alone—accompanies the domestic demand.

An early crisis, that of 1825, illustrates this point.

Obligations had been incurred abroad to what was then a most exceptional extent: we had not then come to look upon the system whereby a man may link his fortune with enterprises in distant lands as a perfectly natural system. South America had severed itself from political dependence upon Europe. It seemed that the new republics were an insatiable and most profitable market for goods, and a secure and highly satisfactory field for investments. The mines of Mexico and of Peru would provide an ever-increasing stream of dividends; the loans to the newly-created republics would—backed as they were by the tax-paying capacity of the newly enfranchised people—enable our capitalists to stake a claim in the lands that would now flourish. Even if these calculations had been justified ultimately they brought present disaster. The obligations incurred, entitling those abroad to call for gold, caused a rapid depletion of the Bank's stock of gold. The circulation of the notes of private banks disguised the fact that the gold basis was being carried away. The Bank of a sudden decided that credit must be contracted. Many firms could not get the advances upon which they had counted, and became bankrupt. The usury laws—prohibiting more than five per cent. interest—were a clog; and the Bank was forced to allay the panic by providing additional money. Notes below £5 had long been withdrawn; but, during the clamour for acceptable money, someone remembered a chest of one-pound notes. These were circulated and had some effect in preventing further failures. The foreign drain needed other measures. Gold

The Crisis
of 1825.

was borrowed from France, and bank rate was raised in order to attract gold from abroad and to discourage discounts at home.

When the war broke out in 1914 the Bank followed the recognised method of dealing with a drain upon its reserve, from abroad as well as from at home. It became loaded up with advances made to those acceptors who could not, by reason of the inability of their debtors to pay, meet the bills. The Bank rate was at once raised to 10 per cent.; and not only was the Bank authorised, with the Treasury's assent, to exceed the statutory limit for notes, but Treasury Notes, additional legal tender, was issued through it to the banks and the public. We may put the matter in this way: Money is needed in our complex state of society for the multiplied and multifarious exchanges by which we live. The money is usually some form of credit paper. When a great mass of credit is annihilated, a substitute is sought. The only acceptable substitute is what the State by its fiat decrees is legal money. Certainly we may assume that in time of monetary stringency fewer transactions will be performed; but the decrease in business will be far more than merely set off by the decrease in means of exchange (in the tokens of credit).

We can hardly doubt that our banking system with its far flung tentacles—no longer confined in its operations to a single country—allows of better organisation in industry and commerce. This better organisation should diminish distressing fluctuations. An industry, the raising of wheat, or growing of timber, or mining of gold, will have its units of production where geography dictates. Yet by the combining effect of the banks the business side may be so concentrated that knowledge of the essential conditions of

The 1914
Crisis.

Steadying
Influence of
the Banks.

the industry are accessible to all who control. There need, then, be no absurd miscalculations leading to a great disproportion between the amount of the particular commodity placed to man's service and the amount that can command prices giving an adequate reward. For instance, the many rubber plantations of the Malay States and those scattered elsewhere throughout the tropical belt are, of necessity, where climatic and other conditions are favourable to the rubber-yielding trees, where, too, the required supply of labour is available. It is, however, to London that these establishments look for capital and control, and particularly for the disposal of the product. The business organisation is centred in London. There the financial arrangements are made—long loans from the investing public, short loans from the banks, prices fixed and profits declared; and there are settled the broad principles upon which the industry shall be managed. Every powerful concern in Britain, even if engaged in highly specialised local industries, maintains its London office. The Ebbw Vale Coal and Iron Company, for example, finds that the trade exhibitions, the facilities for interviews with foreign buyers, for borrowing, for access to tender specifications and the like, amply justify such an establishment. And the same thing applies in not much less degree to other than British concerns. The combining of many units of production may be fraught with danger to the public that buys the product; there is, at all events, the compensation that such combination enables supply to adapt itself to effective demand.

That the banks enable a debt in one country to be set off in another helps to the concentration: in
 Paying a
 London Debt
 in Bombay. a financial centre like London, an exporter of one commodity is paid through the agency of the banks by an importer of a quite different commodity. A consignment of cottons from

Manchester is balanced against a consignment of jute from Calcutta. The London Joint City and Midland Bank has, for instance, as its agent in Bombay the Central Bank of India. If a London buyer wishes to pay in Bombay he transfers a credit from his London bank to the Bombay bank. He can then use his credit in Bombay as a means of cancelling his debt. If a London seller wishes to be paid he instructs his Indian debtor to pay to his credit in Bombay. Certainly a pound sterling in London is not quite the same as fifteen rupees in Bombay; but the difference is slight, never 1 per cent. when the gold currency is operative, so that the facilities afforded by the bank are cheap enough. Examine a paragraph from a recent report of the *Department of Overseas Trade*, and the process will become more concrete. The Commissioner is dealing with a danger incident to the granting of credit: during the economic depression of 1920-21, many Indian importers, finding that the market had gone against them, and not yet schooled as British merchants are to regard their engagements as sacred, had not accepted drafts upon them or having accepted them had failed to pay them when due. "London, Manchester, and other home export houses have in the past been prepared to ship to approved Indian indentors, usually on the D/P (documents against payment) terms, the branches of the exchange banks in India maintaining the drawer's lien on the goods until the drafts were met. In certain cases the goods were shipped, documents against acceptance. The banks have greatly facilitated the trade in up-country centres, such as Delhi and Amritsar, by clearing the goods through to destination and by storing them until the drafts were honoured." The Indian banks, that is, form a safeguard to the English seller, though it must be admitted it will give no great satisfaction to him that he is able, on failure to pay of his

debtor, to retake possession of the goods and bring them back from Delhi.

The Commissioner continues, "It is a most noteworthy fact that the difficulties in the recent crisis have been greatest in those centres such as Delhi and Bombay where the most liberal financial and trading facilities have been granted by British exporters to Indian importers and bazaar dealers. Liabilities have been repudiated and drafts dishonoured on a scale hitherto unknown. It is only natural that some firms, who have hitherto been willing to accept indents direct from bazaar importers and to draw on them in the usual manner, should be doubtful whether the trade is worth carrying on if the Indian importer has no hesitation in refusing to meet his bills when the market goes against him and he is faced with a heavy loss. The inevitable result is a strong reaction on the part of many British exporting houses against direct dealings with the bazaar; and this can only be overcome by a changed attitude in certain quarters of India towards the responsibilities attaching to a business contract." During the boom of 1919 and early 1920, credit facilities had probably been granted to Indian firms not sound enough to warrant them. With greater discrimination in the granting of credit, however, the direct trade should be a reasonably safe and profitable one.

The actual practice would be that a seller in London say, would draw a bill not upon his Bombay customer but upon that customer's bank.

The item in a bank's balance sheet, "Acceptances and Endorsements of Foreign Bills," indicates the extent to which the bank has allowed its customers to call for the support of its credit. The advantage of the process is clear. The bank knows, or should know, the financial position of its customers; it can safely lend its credit.

The customer's credit may be quite good, he may be less likely to fail in meeting his obligations than a better known man is. Yet the business world is happier to see a bank's name on a bill. The drawer can then turn it into immediate purchasing power, discount it, on more favourable terms. What has happened is probably this: the buyer of the goods, in England or in India, has obtained a credit from his banker, a credit that he cancels at a future date when probably he has resold the goods at a profit; the seller of the goods, by means of the credit, obtains another credit from his own banker, a credit he can use as immediate purchasing power. The transaction is resolved into one between banks. The home bank has, as a result, either increased its credit with a bank abroad or diminished it, according as there has been an export or an import. If, instead of being accepted by a bank, the bill bears the name of an accepting house, the essence is the same. The debtor, the buyer of goods, by the payment of a small commission, obtains what is in effect a guarantee of his solvency. The creditor, the seller of goods, obtains a bill he can sell at a higher rate—can discount upon more favourable terms. The merchants for whom the bills are accepted have undertaken to provide funds for meeting those bills at maturity. Thus the liabilities of the accepting houses are the maturing bills; the assets are the obligations of the merchants.

APPENDIX III.

LEGAL TENDER.

Legal tender is such money as the law can compel a debtor to pay: in order that disputes may not arise the law prescribes how a debt is to be discharged. In other words, the privilege of being lawful money is dependent upon the fiat of the State: the State at its will can make and unmake legal tender. But its power to do this does not extend beyond its own borders. Gold, we have seen, is the world standard of value; and we have framed our national system so as to accord with the international one. In our monetary system gold—or Treasury Notes, which are temporary substitutes for gold; or Bank of England Notes, which are promises to pay gold—alone has unlimited power of freeing from debt. The gold is put upon the market as coin. Its quantity can, therefore, be easily and quickly ascertained. In other countries certain silver coins also are legal tender to any amount. But steps must be taken to keep these coins at a fixed ratio to gold; for they circulate above the market value of the silver they contain. Such are the five-franc pieces of the Latin Union: these are no longer coined so that their value, in relation to the gold franc (the *money of account*), itself not coined but the equivalent of $\frac{1}{20}$ of a gold napoleon) is maintained:—

- (i) By the guarantee of the Governments concerned
- (ii) By the scarcity value of the coins.

The silver rupee of India is, likewise, through a deliberate "starving of the currency," kept at a fixed valuation in regard to gold.

We may realise better the idea of legal tender by contrasting the internal circulation with the settlement of international accounts. The quality of legal tender is not applicable here: the fiat of a single government is of no avail. The gold or silver passing abroad is a weight of metal and cancels a debt according to the market price of the metal. Weighing is more convenient than counting when large quantities have to be sold; and the Chinese method, most awkward and dilatory in internal affairs, is the sole one possible where no effective authority can dictate what shall be received in cancellation of debts.

It seems that force of circumstances, rather than force of reasoning, constrained us to relegate silver to a subsidiary place in regard to gold, and to give it a limited legal tender. During the eighteenth century, when gold and now silver were current at varied rates, now gold and now silver would drop out of circulation. If gold were undervalued for the purposes of coinage the silver tended to disappear; and business was hampered through a shortage of small change. For we cannot diminish the size of a coin indefinitely: gold could hardly be put into currency for small payment. The Coinage Act of 1816, establishing the gold standard and giving silver coins a limited legal tender, sought to remedy the inconvenience. The only silver coins that for long had circulated were worn so that they were little more than plain metal discs. These remained simply because loss of weight had reduced their value below that of the metal contained in them. Full weight silver coins would at once have disappeared. The new silver was kept in circulation as coin by being given a higher value as coin

Our Adoption
of the Gold
Standard.

than the metal contained in it warranted. A half-crown became a ticket, printed on silver to insure its more ready acceptance, entitling its holder to one-eighth of a sovereign. The Act was a recognition of what had developed of itself; for silver being under-valued for coinage, none had been coined for almost a century.

The use of an over-valued silver coinage has since 1870 been widely copied. The Governments concerned issue no more than is required for the purposes of trade; and the surplus value is an accession to the funds of the State.

APPENDIX IV.

NOTE ON BILLS OF EXCHANGE AND OTHER NEGOTIABLE INSTRUMENTS.

The ordinary form of a Bill of Exchange is

£100.	CAMBRIDGE, 1st March, 1922.
Stamp	Three months after date pay to Mr.
1/-	Horace Mills for order the sum of One
	Hundred Pounds for value received.
	Accepted payable at Bank of England Bank Branch Street, LONDON. THOMAS JACKSON
	HENRY GRIMES.
To	
Thomas Jackson, Esq.	

Henry Grimes draws the bill (makes a request for payment) on Thomas Jackson, who presumably has undertaken to meet the bill. Thomas Jackson, on whom the bill is drawn *accepts it*, writes his name across it in acknowledgement of his debt. Authenticated thus the

bill is based upon the credit of both Henry Grimes (who in the last resort is liable) and Thomas Jackson (who should pay it upon the due date). The bill is *domiciled*, made-payable at a definite bank, though you should notice that the mere signature of Thomas Jackson is a perfectly good acceptance.

The payment is due to Henry Grimes; but he can assign—transfer his right. And by the bill he does so transfer it to Horace Mills who now has a right against Thomas Jackson.

If Horace Mills himself wishes to cancel a debt by handing over the bill he does so by writing his name on the back. He writes an

INDORSEMENT IN BLANK.

HORACE MILLS.

The bill is now transferable by mere delivery; whoever has obtained it fairly is entitled to claim payment from Thomas Jackson.

Horace Mills may, however, make it payable to a definite person. To do this he writes a

SPECIAL INDOESEMMENT.

Pay Ernest Everett
or Order,
HORACE MILLS.

In order that the bill may again be negotiated Ernest Everett must endorse it. He may endorse it "in blank"; may simply write his name below that of Horace Mills. The bill is then negotiable by mere delivery: Everett has given his order though he has specified no person to receive payment. Whoever obtains the bill regularly is entitled to payment.

Looked at from one point of view the Bill of Exchange is the written evidence of a contract. One part of the contract has been performed. At all events the law presumes that it has been performed, that some consideration has been given for the bill. The person on whom the bill is drawn has had his benefit; the burden he bears in return for the benefit is his obligation to pay the bill at sight or at a definite time. The person who draws the bill has discharged his burden; the bill entitles him to a benefit in return. This benefit he may transfer to another. The usage of merchants and traders, ratified as this usage was by the decisions of courts of law, has been absorbed into the common law.

The ordinary rule is that no one but the parties to a contract can be bound by it or entitled under it. But the convenience of business has led to several exceptions to this rule. Merchants devised means of facilitating trade, and the law has recognised the practice of merchants. Clearly, if the person entitled to a benefit under a contract consents that a third party shall be responsible for the conferring of the benefit, this does not conflict with the general rule. There is then a new agreement. Otherwise a liability cannot be transferred: a man is entitled to know to whom to look for a satisfaction of his rights. A benefit under a contract may be more readily transferred.

The needs of trade have brought to birth a class of promises in writing, the benefit of which may be assigned. No notice is called for to the person who must perform the promise; no loss of his rights through previous irregularity affects the person to whom the benefit is assigned. Such contracts are *negotiable instruments*. The title to such a written promise, the right to the benefit conferred by it, passes by delivery. Though the holder of the document may be quite unknown to the promisor, yet that holder has a right of action. And the holder, always provided that he obtained the instrument in good faith, need not worry about possible defects in the title of him from whom he receives the document. Bills of Exchange (including cheques, which are Bills drawn on a banker) and promissory notes are the *assignable promises* of most importance to the business world.

The distinction between a negotiable instrument and one which, though possessing some similarities, is not negotiable can be readily grasped by considering two cases. In the *London Joint Stock Bank v. Simmons*, the Bank succeeded in an appeal to the House of Lords. A broker had pledged his client's bonds with the bank; the broker failed and the

bank sold the bonds. Simmons sued the bank; but the judgment of the House of Lords was that he could not recover. The bonds were negotiable and: "It is of the very essence of a negotiable instrument that you may treat the person in possession of it as having authority to deal with it, be he agent or otherwise, unless you know to the contrary: and are not compelled, in order to secure a good title to yourself, to inquire into the nature of his title or the extent of his authority." In *Crouch v. Cr dit Foncier of England*, however, the document in question was a debenture assignable under the Companies Act and expressed as payable to the bearer. A thief sold it to Crouch and he sued the Company for non-payment. It was held though, that, despite the wording, the debenture was not a negotiable instrument assignable by delivery. Crouch could not recover because he had no better title to the debenture than his assignor who had stolen it. If it had been a negotiable instrument, Crouch could have recovered: "The person who, by a genuine endorsement, or, where it is payable to bearer, by a delivery, becomes holder, may sue in his own name on the contract, and if he is a *bona fide* holder for value, he has a good title, notwithstanding any defect of title in the party (whether endorser or deliverer) from whom he took it." The document was not *then* a negotiable instrument, since the usage of merchants in regard to it had not become a matter of common knowledge. It would nowadays be regarded as a perfectly negotiable instrument.

One result of the making transferable the rights embodied in a Bill of Exchange is that the Bill has become a flexible paper currency. The original purpose of a Bill of Exchange was to enable a merchant living in one place to pay his creditor living in another place: "A Bill of Exchange, in its origin, was an instrument by which a trade debt, due in

one place, was transferred to another. It merely avoided the necessity of transmitting cash from place to place. This theory the French law steadily keeps in view. In England bills have developed into a perfectly flexible paper currency. In France a bill represents a trade transaction; in England it is merely an instrument of credit."

The Bill of Lading, too, although not a real negotiable instrument, is equally able to assign rights under a contract. Such a document is in the first place a receipt: its type is "Shipped on the good ship *Sarah Jane* whereof is master John Jones, the following specified goods." In the second place the Bill of Lading is the written contract for the carriage of the goods: the shipper has agreed to pay so much as freight, the shipowner—whose agent the master of the ship is—has agreed to take them to a specified port. But a third property in the Bill of Lading has been developed through the custom of merchants: it has become the symbol of the goods named in it; and, whoever has the Bill, having obtained it in a regular way, is entitled to the goods. By the Bill of Lading Act of 1855 the assignment of a bill of lading transfers to the assignee the property in the goods; it transfers also "all rights of suit and all liabilities in respect of the goods, as if the contract made in the Bill of Lading had been made with himself." More than this we should note, however. An unpaid seller has a lien on goods until he is paid; and, if the goods are on their way to the buyer, the seller can retake the goods when he learns of the buyer's insolvency. This right of stoppage *in transitu* cannot be exercised against the person to whom a Bill of Lading has been assigned. That is to say, he who obtains a Bill of Lading may have wider rights than the person from whom he takes it. Yet a Bill of Lading is not a negotiable instrument; for one stolen or

transferred without the authority of the real owner gives no rights to the *bonâ fide* holder himself.

We consider further the assignable contract that is embodied in a **Bill of Exchange**. The convenience of business, sanctioned ultimately by law, early made debts assignable: the promise to pay could be used as a means of payment. So Bills of Exchange became negotiable instruments. The person who took a bill in an honest manner, receiving it as readily as he would have received the current coin of the realm, was entitled to the payment promised in the bill. How others might have obtained the bill mattered not at all; the holder depended solely upon his own conduct in the matter. But, the Bill of Exchange being so potent and withal so delicate an instrument for the accomplishing of an important work in commerce, we need to exercise much care in its manipulation. For, though there has been fraud or deceit in the making of the bill, or in its transfer, or though there is no real transaction to which the bill relates, the endorsee of a bill of exchange for value is entitled to the amount upon the bill as against all precedent parties.

We ought to note that even before acceptance the bill of exchange may be perfect. Indeed, the original purpose of a bill was to provide money in distant places to discharge debts arising there; and the bill, therefore, was generally drawn and circulated before it was accepted. A man comes to another in London and says, "I have a debt to pay in Sydney; you have a debt to collect there, haven't you?" "Yes, so-and-so owes me £1,000." "Well, I have £800 to pay there; would you draw upon your debtor for £800 in favour of my creditor, and sell the instrument to me?" "I will." The instrument is bought, is sent to Sydney, the acceptance is procured, and the money is paid on the maturity of the bill. The drawer's

name is the essential part of the bill, since the drawer is in the last resort responsible for the amount to be paid. You may safely take a bill *drawn* by a good man even though it has not been accepted.

A document cannot be a bill without a drawer's name, though it may very well be without an acceptor's. And, it may perhaps be well to note, a bill drawn by a person in his own favour is a perfectly valid bill. Originally the bill no doubt contemplated three persons, drawer, payee, and acceptor; but our law recognises that at times the drawer may also be the payee. The convenience of this is obvious. A man who has sold goods may not at the moment have a corresponding debt to pay. Yet he would like present payment by discounting a bill of exchange; and he therefore draws the bill payable to his own order.

Such a phrase as "two months after sight" needs some explanation. The date is, as our law says it must be, readily ascertainable. A bill is "seen" when it is presented for acceptance; and the two months run from the date of presentation. If the bill is not accepted when presented proceedings can at once be taken against the person from whom the bill was received. No action, of course, lies against the drawee who may be under no obligation to accept: the only person who can sue him is the person who can show that he agreed to accept.

One or two interesting cases illustrate further points relating to a bill of exchange. In *Gray v. Milner* the document in dispute was drawn without the putting of a drawee's name in the left-hand corner. Instead there was placed an address. Across the face of the bill had been written, "Accepted; Charles Milner." The objection taken to the bill was that Charles Milner could not accept, since his name did not appear on the bill as drawee. The Court, however, held that, though before acceptance there was no

drawee's name on the bill, yet after acceptance the address became definite and certain. Milner, by his signature, acknowledged that he was the person to whom the bill was addressed. A bill addressed to a particular place is meant to be accepted by him who resides there; and the person who puts his name to it is presumed to be the person meant.

In *Currie v. Misa* it was held that an existing debt forms of itself a sufficient consideration for a negotiable security payable on demand. That is to say, the creditor to whom it is given becomes a holder in due course. A cheque was drawn by Misa in favour of Lizardi or bearer; Lizardi gave it to the bankers, Glyn, Mills, Currie & Co., in payment of a debt owed by him to them. There was apparently an absence of consideration between Misa and Lizardi; and it was strenuously argued also that there was absence of consideration between Lizardi and the bank, since an existing debt furnished no new consideration. Still, to the advantage of the commercial community, it was held that a negotiable instrument was given for value even if the debt were antecedent to the making of the instrument.

In *Marston v. Allen* we learn exactly what is meant by "delivering a bill." We are told that "a bill payable to bearer is negotiated by delivery," and that "a bill payable to order is negotiated by the endorsement of the holder completed by delivery." Delivery, of course, implies the intention of passing the property. If a bill is handed to a clerk for the purpose of making a copy, the property has not passed to the clerk though he has possession of it. If, however, the clerk passes the bill to a holder for value, that holder has both possession and property.

A man who transfers a bill to another for value, even though he does not put his name upon it, is not quite free

from responsibility. He warrants to his transferee that there is no defect in the instrument, that he has a right to transfer it, and that he is unaware of anything that would render it valueless. *Gurney v. Womersley* illustrates this. Womersley, a bill-broker, discounted a bill with Overend, Gurney & Co. The bill turned out to be worthless; the acceptance was forged, and the drawer and first endorser were fictitious persons. The Court held that Gurney's could recover from Womersley, since they had had no consideration for their money.

The Bill of Exchange thus allows for the legal extinction of debt without any transfer of legal tender money (whether that legal tender money is the standard metallic money, or bank notes, or tokens).

APPENDIX V.

THE INDIAN CURRENCY SYSTEM.

The Indian system of currency is an interesting one; and it effectively illustrates how little a decree can avail against the custom of a people. The currency is silver kept at a fixed ratio to gold; and the gold upon which the currency is based is kept at London. The rupee—at present (1922) circulating as equivalent to 11·30016 grains troy of fine gold, i.e. one-tenth of a sovereign—is the unit of value. We may perhaps anticipate, however, that the difficulty of maintaining this high ratio will shortly lead to a resumption of the former ratio of $\frac{1}{15}$. Gold is the standard of value; but since the smallest gold coin would be inapplicable for the payment of wages and for retail purchases, the silver rupee alone remains in effective circulation. Large sums are estimated in lakhs of rupees (a lakh being 100,000), and larger sums still in crores of rupees (a crore being 100 lakhs or 10,000,000 rupees). A crore of rupees is, therefore, a million pounds; a lakh is ten thousand.

The difficulty experienced in a bimetallic system of variation in the relation between gold and silver is solved by a policy of restricting the issue of rupees—of “starving the currency.” The rupee is a token coin; its value as a metal is less than its value as the equivalent of $\text{£}\frac{1}{10}$. We may look upon it as a small bank note stamped on silver

to make it more acceptable. Its internal and external equivalence with the amount of gold for which it passes is, however, assured by the possibility of changing at will for gold. Before 1920 the rate of exchange had been £ $\frac{1}{15}$. But the possibility that an enhancement of the value of silver might make the metal worth *more* than what it purported to be was not guarded against. And, as a result of the fall in sterling and the rise in silver, this actually happened. If the value of the metal exceeds the value of the coin to any considerable degree, the coins will find their way into the melting pot and be sold as silver. No precautions or penalties will prevent this. Now, since a rupee contains 165 grains of fine silver, the melting point of the rupee is reached when silver touches 43d. an ounce (if we take the rupee as £ $\frac{1}{15}$). How far this was exceeded we may note from the report of the Controller of Currency.

"On the 11th February, 1920, the price of silver in London had reached the record figure of 89½d., this having been due very largely to a strong demand from China. By the 1st April, however, the price had fallen to 72½d., owing principally to sales on account of China. There were also other factors which contributed to the reaction, viz. the strengthening of the sterling exchange with New York, the announcement of the intention to reduce the fineness of the United Kingdom silver coinage, and large sales of demonetised coin from the Continent. The fall in price continued until 44d. was reached on the 15th June. In the third week of June, however, the United States Mint began to accept tenders made under the Pittman Act; a revival in the price of silver immediately followed, since this action represented the withdrawal of one-quarter of the world's production from competition in the market. There was a good deal of speculative buying, and a demand set in from the Indian bazaars. This, coupled with a weakening in the

sterling-dollar exchange, raised the London price to 63½d. by the 20th August. The price remained at or about 60d. until the end of September, but early in October it began to weaken; by this time it was known that the Indian monsoon had been below the average, and exports of merchandise from China had fallen off. From the 19th November the fall became rapid. China was now known to be in the grip of a severe famine, and large quantities of demonetised coin continued to come in from the Continent of Europe. The quotation at the end of December was 40½d., having been as low as 38½d. on the 10th of that month. During the remaining months of the year under review the trend of prices was continuously downward. Continental supplies were freely offered, and China was more a seller than a buyer. During this period practically the only support of the market was from India. The lowest price recorded was 30½d. on the 5th March, though there was a slight recovery before the end of the year."

It was in these circumstances that, in the beginning of 1920, the Secretary of State for India adopted the recommendations of the Committee he had appointed to advise on Indian exchange and currency. These recommendations are thus summarised:

- "(a) That the present rupee, unchanged in weight and fineness, should remain unlimited legal tender.
- (b) That the rupee should have a fixed exchange value, and that this exchange value should be expressed in terms of gold at the rate of one rupee for 11·30016 grains of fine gold, that is, one-tenth of the gold contents of the sovereign.
- (c) That the sovereign, which is now rated by law at rupees 15, should be made legal tender in India at the revised ratio of rupees ten to one sovereign.

n. c.

- (d) That the import and export of gold to and from India should be free from Government control as soon as the change in the statutory ratio has been effected, and that the gold Mint at Bombay should be open for the coinage into sovereigns of gold tendered by public.
- (e) That the notification of Government undertaking to give rupees for sovereigns should be withdrawn.
- (f) That the prohibition on the private import and export of silver should be removed in due course, and that the import duty on silver should be repealed unless the fiscal position demands its retention."

The recommendations were not carried out in their entirety; for the rupee was exchanged in the ratio of ten to one not against gold but against sterling.

The method of ensuring for India a stable gold exchange standard is dependent on the fact that India has annually a great amount to pay to London. India is a debtor country, and must constantly maintain an excess of exports over imports. Its Government must each year remit to London a sum exceeding 20 million sterling in payment of interest on loans contracted in England, of interest on the guaranteed capital of the railways, of the expenses of the British troops maintained in India, of pensions to retired civil or military officials. The payments are usually made by the selling in London of Indian Council Bills to whomsoever has money to pay in India: the proceeds from the sales provide in London the means of disbursement to those in regard to whom India has incurred obligations.

The Indian Government keeps at the Bank of England a reserve of gold—a reserve not placed to its account, but

simply kept as in a safe-deposit, "earmarked" for the use of the Indian Government. It keeps also a reserve of silver and gold at Calcutta. By means of these reserves the silver rupee could be kept at the ratio of 15 to a pound sterling. They form a kind of reservoirs steadying and regulating exchanges. If, owing to heavy exports from India, there is an exceptional demand for India Council Bills (giving the right to rupees in India), so that tenders over $1/4$ the rupee are forthcoming, more bills are created and sold. The surplus, all obligations having been met, is placed in the reserve. The reserve in London grows; and the creation of fresh bills brings the offers again down to $1/4$. If, on the other hand, fewer payments than usual are to be made to India the tenders for India Bills will be low, will perhaps fall considerably below $1/4$. The India Council will in this event sell no bills, but will meet its obligations out of its accumulated reserves. If still the price is low the Indian Government will offer in India bills on London, paying them out of its London assets.

In the first event the Indian Government will need to find more rupees in India: it will therefore buy silver in London (paying for it out of its London reserve of gold, and placing in that reserve any profit made from the coinage) and ship it to Calcutta.

The rupee by these means is stabilised not indeed at par but within what we might call the specie points. $\frac{5}{32}$ d. is taken as the cost of carriage of gold; so that the Indian Government will sell no bills at a rate below $1/4 \frac{5}{32}$ d., and—since debtors of India have the option of sending gold or of buying bills—none will be bought at a rate above $1/4$ plus $\frac{5}{32}$ d.

It is clear that this machinery can work only because the mutual obligations between England and India cancel one another within a reasonably short period. If India

had, during a protracted time, more to pay than to receive so that Council Bills were for long much below $1\frac{1}{4}$ then the London gold reserve would be exhausted. So, too, an excessive demand for sums of payment in India would lower the Indian reserve unduly. We may, if we like, look upon the rupee as a bank note assured in this way of convertibility.

We have, you note, an instance here of this fact that by limiting the amount coined the coinage can be kept permanently above its value as commodity. It is only when there is free and gratuitous coinage that it is indifferent whether the metal is coined or not.

The position in the Spring of 1922 was well put by the Vice-Chairman of the National Bank of India at the annual meeting:—

The Position
in the Spring
of 1922.

“As to India, it is sufficient to point out that the statutory rupee remains at 2s., with Rs. 10 the equivalent of the £ sterling. This was a part of the scheme of currency reform, the adoption of which was recommended by the Committee appointed to examine and report on the subject, and although the Government gave effect to it, on paper, perhaps fortunately it has never come into operation and might well now be replaced by the 16d. rupee, with which we were familiar for so many years, and which, moreover, is the basis which the Government have themselves adopted in framing their Budget for the current year.

The statutory rate has, indeed, proved a real hindrance to trade. Indian merchants having frequently made use of it as an excuse for delay in taking delivery of goods which had arrived at their destination in fulfilment of contracts previously entered into, which, in their view, might well be ignored until a purchase of exchange at the Government rate of 2s. could be effected.

Free from Government interference, the sterling value of the rupee is left to find its own level, and to-day's T.T. quotation is 1s. 3 $\frac{3}{16}$ d.; a year ago it was 1s. 3 $\frac{1}{2}$ d.

Fluctuations in rates of exchange, also in prices of silver, have been much less violent than in 1920, and the market price appears to be settling down again to near 1s. 4d.

EXCHANGE.			
	Highest.		Lowest.
1920 ...	2s. 10d.	Feb. 11 ...	1s. 4 $\frac{3}{4}$ d. Dec.
1921 ...	1s. 6 $\frac{1}{4}$ d.	Jan. 8 ...	1s. 2 $\frac{7}{8}$ d. March.
1922 ...	1s. 3 $\frac{1}{16}$ d.	Jan. 3 ...	—

SILVER, PER OZ.			
	Highest.		Lowest.
1920 ...	89 $\frac{1}{2}$ Feb. 11 ...	...	38 $\frac{7}{8}$ Dec. 10.
1921 ...	43 $\frac{3}{8}$ Sept. 27 ...	...	30 $\frac{5}{8}$ March 5.
1922 ...	35 $\frac{1}{2}$ Jan. 9.	...	—

With the Indian Mints still closed to the coinage of silver to the public it is strange that the country should continue to import this metal so extensively as is being done, and this, too, in spite of a large trade balance adverse to India.

The figures for 1919 and the last two years compare thus:—

- April 1, 1919.—March 31, 1920 (12 months), Rs. 88,00,00,000 in favour of India.
- April 1, 1920.—March 31, 1921 (12 months), Rs. 50,00,00,000 against India.
- April 1, 1921.—Feb. 28, 1922 (10 months), Rs. 34,00,00,000 against India.

It is clear, I think, that the imports of silver—the figures of which are as follows—are not being paid for by exports of goods, and presumably must be increasing

India's indebtedness to Europe, chiefly to this country :—

April 1, 1920.—March 31, 1921 (12 months), in value Rs. 11 crores.

April 1, 1921.—Dec. 31, 1921 (9 months), in value Rs. $11\frac{1}{4}$ crores,

and, deducting Rs. $6\frac{3}{4}$ crores exported, the excess in imports is Rs. $15\frac{1}{2}$ crores.

In the same period the imports of gold were of the value of Rs. 32 crores, and of the exports Rs. $37\frac{3}{4}$ crores, the bulk going to America and Japan, an excess in exports of Rs. $5\frac{3}{4}$ crores."

APPENDIX VI.

LONG TERM LOANS.

Between the planning of an ocean steamer and the time when it will, from the freights it earns, bring a gratifying income to its owners, there is a great interval. Yet all the while capital is being employed; it is locked-up, sunk, so as to be no longer available. A mine, a rubber plantation, a cotton growing area, give returns only in the long run. There are two methods of disposing of one's savings, of the excess of earning over expenditure. We may place these savings whence we may obtain them at will, or almost at will, in a bank, in war saving certificates, in exchequer bills. We may place them whence we cannot recover them at our wish, may invest them in a firm, or by purchasing government stock substitute ourselves for another as a creditor of the State. If we adopt the second method we, in order that the return of interest may be the greater, relinquish the idea, so gratifying it would seem, of having our funds always available. The distinction between long term and short term loans is not, perhaps, to be clearly drawn: an investment in a company—a part ownership by way of shares, a loan by way of bonds or debentures—can readily become the means of obtaining immediate purchasing power from the bank; and the Stock Exchange affords means of exchanging it for immediately available

capital. To the investor this is almost the same as the possibility of withdrawing his investment. It may well be a matter of indifference to a Government whether to fund its debts—to make them part of that debt upon which it undertakes merely to pay a fixed rate of interest, or to renew floating debts as they matured. A business man may rely upon an overdraft, a short loan from his banker, or may decide to turn his business into a company and invite capital. In the main, however, we may say that loans from the banks are short term loans; loans upon the Stock Exchange are long term loans. An order is given to a manufacturer. The manufacturer borrows from the banker in order to buy raw material and to pay his workers during the period of production. This is a short term loan, repaid when the goods are transferred to the merchant. The latter, too, borrows on the security of his purchase; and his temporary advance from the bank is again repaid when the goods pass to the retailer or to another merchant. If, however, a manufacturer seeks to develop his undertaking to build further or to instal machinery, he calls, by inviting prospectus, for loans that will earn interest but which cannot be withdrawn.

Bankers' advances—by discounting bills, by granting credits on collateral, by loan on call—com-
 prise roughly the fund from which short
 term loans are made; investments, in re-
 sponse to the invitations scattered broadcast in pro-
 spectuses, form the long term loan fund—investments
 provide the capital, the yoke that will subdue natural
 powers and enable man to control them for his purposes.
 The bank mobilises capital for temporary use in dis-
 counting commercial paper. The joint-stock company
 mobilises capital for more extended use, to build factories
 or to instal plant. It is, indeed an extraordinary develop-

Long Term
Loans.

ment of these days that an investor now has so wide a choice of directions in what to venture his fortunes. He is not confined to new enterprises in his own country, to the building of a railway, or the initiation of a motor char-a-banc service that will diminish the takings of the railway. The whole world is before him; he may help to finance a coffee plantation in Ceylon or a gold mine at Johannesburg, and he may rely upon the faith of peoples he will never visit but who will thank him for providing present means of making the best use of their natural resources. Certainly there is at the moment, since the Great War is still so close to us, some reluctance to invest capital abroad. It was even necessary for the Nord Railway in the Spring of 1922, though the issue had the guarantee of the French Government behind it, to offer its 6 per cent. bonds at 90—a yield of $6\frac{2}{3}$ per cent. We may assume that a British railway would have raised money on much easier terms. The reluctance is in part justified: there is always danger of contention when one country is heavily indebted to another. Perhaps the people of the Argentine gladly pay to British investors a part of the yearly earnings of its ranches and railways. But they do this because the tangible results of the loan are there; because the amount paid is not felt to be a burden; and maybe because they trust to borrow still more. It would be different if it were a payment such as that contemplated from Germany to France and Italy; from Italy to Britain; from Britain to the United States.

A point to be noticed, too, is that long term loans may be of various kinds. The risk of one is great, of another almost negligible; and the rate of returns is proportionate (or nearly so) to the risk. A loan to the British Government will yield its 5 per cent.; an advance of capital for a new gold

Degrees of
Risk.

mining enterprise will yield its 50 per cent., or again it will not. The risk of no yield at all is present in the second and not in the first. The cautious investor will buy consols, the man who enjoys the exhilaration of risk-ing will be tempted by the prospectus promising high profits. In a single company itself we may have degrees in risk-bearing; so that we have different kinds of shares and different kinds of debts. There are ordinary shares, to which no particular privilege is attached, that may earn nothing one year but a great deal another; there are preference shares, upon which a dividend is paid before the ordinary shares participate; there are cumulative preference shares, the claims of which unsatisfied one year are carried forward to the next. There are debentures secured by mortgage, and others not so secured. Investment is facilitated also, we should note, by our adoption of the principle of limited liability, so that a man ventures not his whole fortune but a part that he can presumably afford to risk.

The value of a stock is dependent upon (1) its capacity to earn interest or dividends, (2) the length of time that such capacity may be calculated upon, (3) the possibility of its rising in price upon the Stock Exchange. The three properties will appeal to different investors, to the same investor at different times. A highly speculative stock, one that experiences rapid ups and downs of prices, attracts a man who is little moved by the prospect of small yet certain gains; an undertaking that will possibly earn 30 per cent. for a few years delights a man who is less eager for permanent safety than for present profit.

APPENDIX VII.

BANKING AND THE GENOA CONFERENCE.

Trade can go on steadily only when reasonable anticipations are fulfilled. If there is a chance of an enormous gain, balanced by a chance of enormous loss, there certainly is some incentive to gambling. But the business man, though not averse to an occasional hazardous venture, cannot look with equanimity on a continuous course of desperate gambles. He would like to be assured that what he has bargained for shall be his; and he is willing to relinquish the hope of getting far more than he expected so that he may be certain that he will not get far less than he expected. In other words, he is anxious that the monetary unit, the measure of his debits and credits, shall not fluctuate wildly. That the names of the unit remain unchanged, that it is still called a pound sterling or a dollar or a franc or a mark, is not the matter of moment. What he is interested in is the purchasing power of that unit; if he has sold a dozen yards of cloth for a pound he would like to know that, when he spends that pound, he will obtain for it what he regards as a fair compensation for his cloth. The business world, that is to say, is hungrily seeking a

means of obtaining a reasonable stability in the purchasing power of the monetary unit. The equivalence of that unit to a fixed weight of fixed commodity affords something of a guarantee against excessive variations; and the experts whose recommendations were whole-heartedly adopted at the European Conference at Genoa, during the April of 1922, urged, therefore, that the currencies of the world should again be placed upon a gold basis. They relinquished possible aspirations after a stable monetary unit, based on abstract Index Numbers, and contented themselves with what alone is practicable, since it alone is comprehensible to the community at large. And, as you note, it is the general community, not the theorist who has spent some years of study in getting at the back of money and so thinking only of its powers of purchase, that is concerned in this matter of money.

Consider these recommendations by which it is hoped to keep the currencies in a stable relation to one another, and to make the value of a monetary unit again a calculable thing. The first resolution does not exaggerate in attributing the deplorable state of Europe to the breakdown of its currency systems; this breakdown, even more effectually than a breakdown of its transport system would have done, has prevented the co-operation among men by which in these complex times we live and prosper: "The essential requisite for the economic reconstruction of Europe is the achievement by each country of stability in the value of its currency." Moreover, since no country to-day can flourish without the co-operation of its neighbours, near and far, "It is desirable that all European currencies should be based upon a common standard." "Gold is at present the only common standard which all European countries could at present agree to adopt." These premises being admitted,

The Problem
for Europe.

and only the high and dry economist who has lived so long with abstractions that he is out with touch of real life will dispute them, the pertinent question is "How shall the gold basis be restored?" The one reminiscence of that basis, so far as most of the continental currencies are concerned, is the name of the monetary unit. The mark and krone and rouble have no relation to the Coinage Laws of the issuing countries, and their values depend simply on the decree of the Government. If the State issues an accession to the already appalling amount of paper, the value of a unit decreases; if in self-denying fashion the State destroys the notes that purport to be worth so many marks or roubles, then the value of a unit increases. The fiat of the State now controls value; get back to gold and we get to something more reliable. The restoration of gold is to be brought about by a convention, in which the United States, where at the moment the one free market for gold exists, will take part. The Federal Reserve Bank has already (April 26th) heartily approved of the convention; and we may take it that there will be effective co-ordination in policy between Europe and the United States. Only by such co-operation could any scheme for stabilising the monetary unit be a success. Except in the case of Great Britain the re-establishment of the gold standard is certain to take many years. But it is well to know what to aim at; and the convention will at all events enable countries genuinely anxious to put their currencies on a sound foundation to economise in the use of gold.

The process outlined is as follows: "The Governments of the participating countries declare that the restoration of a gold standard is their ultimate object, and they agree to carry out, as rapidly as may be in their power, the following programme:—

Return to the Gold Standard.

(a) 'In order to gain effective control of its own currency each Government must meet its annual expenditure without resorting to the creation of fiduciary money or bank credits for the purpose.' (The truth is recognised, that is, that in order to reduce the astounding amount of fictitious money the Governments must so reform their Budgets that there is an excess of income over expenditure. Only thus can there be any amortisation of public debts. The question for us, therefore, is a very practical one; should we not gladly submit to the burden of taxation now upon us in order that a sound currency may be the more rapidly restored? *Reduce taxation and restore the currency* are incompatible demands.)

(b) 'The next step will be, as soon as the economic circumstances permit, to determine and fix the gold value of the monetary unit. This will not necessarily bear the former gold power.' (That is, there may be, in countries where the currency has fallen far below the old parity, a partial repudiation of debts, a kind of composition with creditors. A new gold par is fixed; the franc, for example, may be taken as half the weight of the former gold franc, and stability is maintained at this new valuation. A return to the old par world, in countries like Italy and Poland, be a long and painful process. It would involve constant readjustments of money wages and prices with all the social and economic dislocation of these adjustments: and it would involve, too, a continual increase in the burden of internal debt.)

(c) 'The gold value so fixed must then be made effective in a free exchange market.'

(d) 'The maintenance of the currency at its gold value must be assured by the provision of an adequate reserve of approved assets, not necessarily gold.' (What is projected here is that a participating country in order to

preserve its gold standard may maintain, in addition to any gold reserves held at home, reserves in other countries of approved assets. These will be bank balances similar to those maintained by the Joint Stock Banks at the Bank of England, bills, short-term securities, and other suitable liquid resources.) "

APPENDIX VIII.

INTERNATIONAL CO-OPERATION AMONG THE BANKS.

The Genoa Conference, at all events so far as the economic experts are concerned, recognised that the prosperity of one country is closely bound up with the prosperity of others. In these complex days we rejoice and sorrow in unison with the rest of the world. The close connection is not more real in regard to money matters than in regard to others; it is more obvious, however, and this is probably why agreement in finance has been more readily achieved than in more important things. The further extension of the banking system is what we contemplate here. Even as it is, the banks of the world are closely allied. In its financing of foreign trade the banks are playing an ever growing part; every export becomes in the end a credit for an English bank abroad, every import means that a foreign bank is building up a credit in England. When relations are so intimate it is clearly a matter of importance that the unit in which reciprocal credits are measured shall be, at all events roughly, the same in all trading countries. This is so only when the unit is equivalent to a definite amount of a definite commodity, when, in short, countries base their currencies on gold. That gold would not be forthcoming

if every claimant strove to enforce his claim matters not at all. What is required is that people shall be convinced of their ability to draw gold at desire; they believed, and had just cause to believe before the War and its dislocations, that the paper instruments could without delay be converted into gold. The promise to pay gold, the bank note, that is, would be at once honoured; the command to pay gold, the cheque, would at once be obeyed. And, being convinced that their claims to gold would be met, men did not enforce those claims. It was enough that the claims could be exchanged for the commodities wanted. The world lived, in short, under a system of barter, with, however, the enormous advantage of a money measure. The condition of prosperity, that services could rapidly and without difficulty be exchanged, was achieved by having a measure that men trusted. The relatively stable measure has temporarily gone; and the efforts of bankers throughout the world are directed to its restoration.

What is now contemplated is an international co-operation, a universal clearing house. Just as the London Bankers' Clearing facilitating exchanges economises extraordinarily the use of gold, so on a much greater scale would the device foreshadowed. The gold standard would be maintained, yet the movement of gold would be of the slightest. The Bank of England will shortly call a convention to bring about the desired system; and the Federal Reserve Banks of the United States, without the hearty co-operation of which no scheme would have much success, have already signified their approval of the purpose, and their intention to participate in the convention. With the resolutions adopted all will heartily agree. Perhaps the following is rather a pious aspiration than a realisable project, however:

"Banks, and especially banks of issue, should be free from political pressure, and should be conducted solely on lines of prudent finance. In countries where there is no central bank of issue one should be established." In moments of grave emergency, we may anticipate that no banks would be able to resist the pressure put upon them by the State, certainly none did during the European War. In our own case, the Bank of England Governors must have viewed with great misgiving the astounding growth, during the War years, of the credits sought by the Government. Another resolution emphasises and puts in clear-cut phrases what has been repeatedly preached at length from many a pulpit: "The industry of Europe cannot hope for a permanent return to prosperity so long as it has to bear, either directly in the form of taxation or indirectly in the form of inflation of currencies, the most insidious and objectionable of all forms of taxation, a burden of Government expenditure which is beyond its capacity." What exactly is meant by calling inflation of currencies "the most insidious and objectionable of all forms of taxation"? The State has the sovereign right of inflation; it can decree what shall be regarded as a lawful release from debt, and what it decrees may have no relation to cost or production. It may be a credit in a bank against which the State authorises itself to draw cheques, it may be the paper nominally equivalent to so much gold. In any event the money that has come into being by the mere decree of the State competes with the existing money; in other words, the claims upon things offered for money are increased. And as the claims are multiplied their separate worth diminishes: if two pound notes run after the same thing as a sovereign ran after before, then the price of that thing will inevitably be doubled. The State can create money; but it cannot create the real goods, the bread and bacon,

and boots, that will be exchanged for the money. By a continuing process of inflation the various Governments have confiscated, secretly and unobserved, the major part of the wealth of their citizens. The claims attested by money, in the hand of the citizens are the reward of services conferred; the claims that the State creates have nothing behind them except the power of taxation.

The co-operating banks will in particular need to deal wisely with the grave problem of international indebtedness. The countries of the world are nowadays in an extraordinary condition. There were certainly, even before 1914, many countries indebted to foreigners. But the debts were almost invariably represented by something tangible, a railway, a great business undertaking, a well equipped municipality; and the debts were payable to individual capitalists who had foregone their control over capital so that undeveloped countries might the more rapidly rise to affluence. The war debts, however, have left no good behind them, and are due in great measure from Government to Government. This very fact has the seeds of contention in it; for no debtor has a consuming love for his creditor. This is so even between former allies; it is more so when the debts are penalties. We may, perhaps, therefore think the following statement mild enough: "Foreign obligations by one country must be balanced by a capacity in other countries to absorb the surplus production with which alone those obligations can be met. If the burden of any country's external obligations is beyond its capacity to pay, and it cannot be assisted by foreign loans, the effort to meet those obligations must result on the one hand in dislocation of markets in other countries, and, on the other hand, in a continuous depreciation of the currency of the debtor country, which will

Problem of
International
Debt.

entirely prevent it from making any start whatever in the direction of stabilisation." The progressive decline in the purchasing power of the German mark, a decline not yet ended, is a sufficient commentary upon this statement.

For the maintenance of the parity between gold and paper, each country will naturally be left to frame its own regulations; for the conditions of the countries vary greatly: "Credit will be regulated not only with a view to maintaining the currencies at par with one another, but also with a view to preventing undue fluctuations in the purchasing power of gold. It is not contemplated, however, that the discretion of the central banks should be fettered by any definite rules framed for this purpose, but that their collaboration will have been assured in matters outside the province of participating countries."

APPENDIX IX.

THE TRIAL OF THE PYX.

The manner in which the public are assured that the provisions of the Coinage Acts of 1870 and 1891 are faithfully carried out is illustrated by the verdict below. It is an extract from the Annual Report of the Mint (compiled by the Deputy-Master whose nominal head is the Chancellor of the Exchequer). Standard Trial Plates, the fineness of which has been most carefully determined have been prepared. With these unissued coins, impartially and at irregular periods selected, are compared by Commissioners unconnected with the Mint. Here is the verdict for 1913, the last year of an issue of gold coins in any amount.

“ We having been sworn on 3 March 1914 before the King’s Remembrancer, at Goldsmiths’ Hall have made the assays and trials of gold and silver coins in the Pyx of the Royal Mint, which, according to accounts produced by the officers of the Mint were coined from 1st January 1913 to 31st December 1913.

Verdict of the
Jury of the
Goldsmiths’
Company at
the Trial of
the Pyx, 1914.

We ascertained that the number of coins, both of gold and silver, in each packet produced corresponded with the number which the officers of the Mint represented it to contain, and we took one coin from each of such packets of gold coins, amounting altogether to 127 sovereigns and

to 31 half-sovereigns; and we weighed each of the said coins separately and ascertained that they were within the remedy as to weight prescribed in the First Schedule to the Coinage Act 1870, as amended by the Coinage Act 1891. We found that the variation from the standard of weight was minus three-thousandths of an ounce ($- \cdot 003$ oz.) on the whole of such coins. We then melted the said gold coins into an ingot, and assayed such ingot, comparing it with the standard gold Trial Plate produced by the Board of Trade; and we found that the amount of variation thereof from the standard of fineness was plus nine hundred-thousandths (or $+ \cdot 00009$) and that, therefore, the said metal was within the prescribed remedy as to fineness. We weighed the residue of the said gold coins in bulk, and we ascertained that they were within the remedy for weight. We then took from such residue ten sovereigns and four half-sovereigns and weighed and assayed them separately, and we found that such sovereigns weighed 123·396 . . . grains, and that such half-sovereigns weighed 61·711 . . . grains. We then assayed the said ten sovereigns and four half-sovereigns, and we found the millesimal fineness of such sovereigns to be 916·71 . . .”

Similar elaborate experiments tested the various silver coins; the verdict was read over to the Commissioners; was signed by each and “Dated the 13th day of May, 1914.”

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PRINTED AT THE BURLINGTON PRESS, FOXTON, NEAR CAMBRIDGE, ENGLAND

